

### VILLAGE HALL DESIGN FINISHES SUBCOMMITTEE MEETING MINUTES

Monday, May 17, 2021 – 2pm Village Hall, 10004 New Town Road Special Meeting

### SPECIAL MEETING AGENDA

The Village Hall Design Finishes Subcommittee will meet on Monday, May 17, 2021 at 2pm at Village Hall (10004 New Town Road) with the Village Manager to choose interior and exterior finishes, as well as furniture for the new Village Hall.

### **AGENDA ITEMS**

### 1. Call to Order

Mayor Pollino called the meeting to order at 2:05pm.

### 2. Determine Quorum

Mayor Pollino determined a quorum was present. **Present:** Mayor Pollino, Mayor Pro Tem Vandenberg

Absent: None

Staff Present: Christina Amos

### 3. Adoption of the Agenda

MOTION: Mayor Pro Tem Vandenberg moved to adopt the agenda as presented.

**VOTE:** The motion passed unanimously.

### **BUSINESS ITEMS**

### 1. Discussion and Consideration of Interior Finishes, Exterior Finishes, and Furniture

Christina Amos, Village Manager, discussed interior, exterior, and furniture design finishes for the new Village Hall with Subcommittee Members Mayor Pollino and Mayor Pro Tem Vandenberg.

Taylor Miller, PMC Furniture Representative, presented a furniture plan for all rooms of the new Village Hall. The committee discussed details of furniture including finishes and directed Mr. Miller to present a revised package based off options selected with finishes.

Ms. Amos then went into detailed plans of interior lighting fixture, plumbing fixtures, and doors and hardware. Selections were recommended as revisions to the proposed selections from the vendor.

The subcommittee members made recommendations on specific furniture, plumbing and lighting fixtures, and door hardware. (See attached documents, which are included as references in these minutes).

### **ADJOURNMENT**

**MOTION:** Mayor Pro Tem Vandenberg moved to adjourn at 4:00pm.

**VOTE:** The motion passed unanimously.

Adontad:

6-8-21

Joseph E. Pollino Jr., Mayor Village of Marvin

Austin W. Yow

Village Clerk & Assistant to the Manager

Page 1 | 1

New Town Hall Village of Marvin, NC

creating spaces that work wonders.

### PMC COMMERCIAL INTERIORS

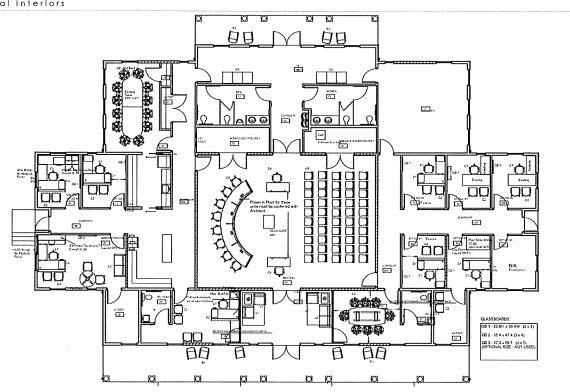
Prepared By: Taylor Miller Taylor.Miller@pmc.works | 803.463.1169

Issued: 5/17/2021



Product
Floorplan and Product

Floorplan
PMC Commercial Interiors

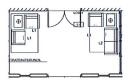


PMC Commercial Interiors

### Lobby

### SOURCE Club Chair



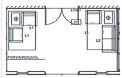


### LORE Club Chair

- Low Profile Arms Grade A Fabric Contrasting Fabrics for upcharge. Square or Round Steel Legs, powdercoat finish TBD

# SOURCE Loveseat



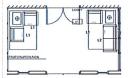


# LORE Loveseat

- Low Profile Arms Grade A Fabric Contrasting Fabrics for
- upcharge.
  Square and Round Steel Legs,
  powdercoat finish TBD

SOURCE Cache End Table





### Cache End Table

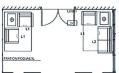
- 17.5h x 18w x 16d
   Steel frame to have powdercoat finish
   Wood/Laminate finish TBD

PMC Commercial Interiors

Lobby - Alt 1

National Hobsen





National Hobsen

- Wood Frame Finish TBD
   Walnut or Maple Frame
   Contrasting Upholstery Options
   Low Profile
   Ottoman Available

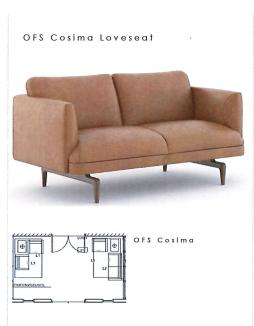
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# Lobby - Alt 2

OFS Cosima



OFS Cosima





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Lobby - Alt 3

JSI FINN





JSI FINN LOVESEAT

JSI FINN LOVESEAT



JSI SOFA

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Lobby - Alt 4

ERG BRYANT



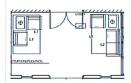
DI II

ERG Bryant

Lounge Chair and Side Chair option

ERG DARBY





ERG DARBY

PMC Commercial Interiors

Lobby - Alt 5

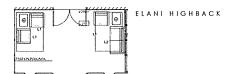
CAROLINA ELANI CHAIR



DELANI CHAI

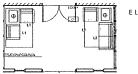
CAROLINA ELANI CHAIR





CAROLINA ELANI LOVESEAT





ELANI LOVESEAT

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Lobby - Alt 6

GLOBAL VITROLA LOWBACK



VITROLA LOWBACK

GLOBAL VITROLA HIGHBACK





GLOBAL VITROLA LOVESEAT





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Lobby - Alt 7

ERG ALBURY LOWBACK

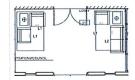


INSCRISORCE.

ALBURY LOWBACK

ERG ALBURY HIGHBACK





ALBURY HIGHBAC

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# Lobby Continued

### Megan Table Lamps



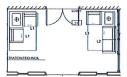
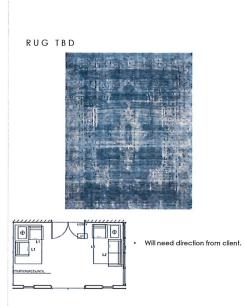


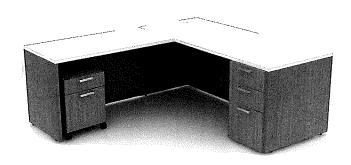
Table Lamps

Bronze finish X-shaped base



PMC Commercial Interiors

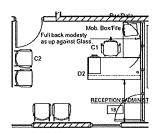
### Reception/Administrative





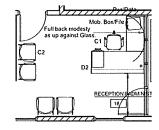
### AIS CALIBRATE

- 30d x 72w Desk Shell with Full Modesty Panel
  24d x 48w Return (Lefthand)
  8ox/Box/File and Box/File Mobile pedestal.
  Finish Selections TBD.



### SOURCE CACHE GUEST CHAIR

- Three back shapes, cache in, cache out, cache straight.
  Fully Upholstered in Grade A Fabric

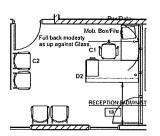


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### Reception/Administrative - Alt 1



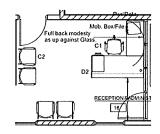
AIS CALIBRATE





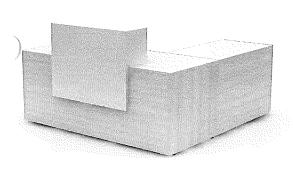
### SOURCE CACHE GUEST CHAIR

- Three back shapes, cache in, cache out, cache straight.
   Fully Upholstered in Grade A Fabric

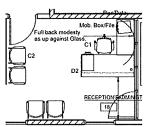


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### Reception/Administrative - Alt 2



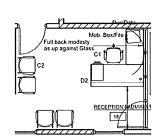
AIS CALIBRATE





### SOURCE CACHE GUEST CHAIR

- Three back shapes, cache in, cache out, cache straight.
   Fully Upholstered in Grade A Fabric



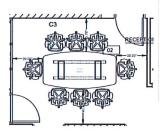
PMC Commercial Interiors

### Public Meeting Room



### AIS CALIBRATE TABLE

- 48d x 96w Boat shaped table.
   Grade A Laminate Finish TBD

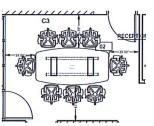






- Mesh backGray frameFixed ArmsGrade A Seat Upholstery.





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# Public Meeting Room Client Requested Solution-Options

Option 1

\$680.16 ea.

\$604.76 ea.



VIA PROFORM

- Midback
   Fully Upholstered in Grade B Vinyl
   Aluminum Loop Arm with Poly Black Arm Cap
   Aluminum Base

Option 2

VIA PROFORM

- Midback
   Fully Upholstered in Grade B
   Vinyl
   8-Way Adjustable Arms
   Aluminum Base

Option 3

\$542.36 ea.

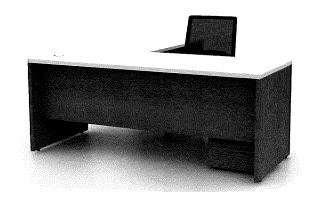


VIA PROFORM

- Midback
   Fully Upholstered in Grade B
   Vinyl
   8 Way Adjustable Arms
   Black Poly Base

PMC Commercial Interiors

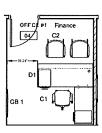
### Private Office Solution

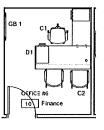


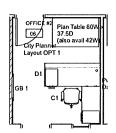


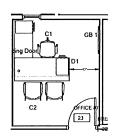
- 30d x 72w Desk Shell with 3/4 Modesty Panel
  24d x 48w Return
  Box/Box/File and File/File storage
  Laminate finishes TBD

  .





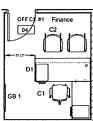


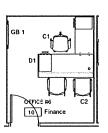


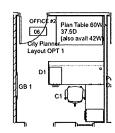
PMC Commercial Interiors

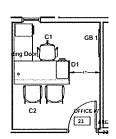
### Private Office Solution - Alt 1









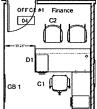


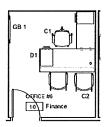
PMC Commercial Interiors

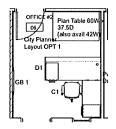
### Private Office Solution – Alt 2

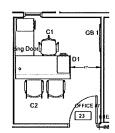


AIS CALIBRATE



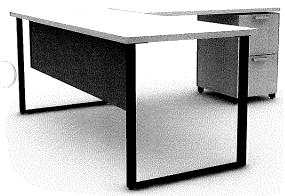


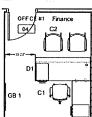


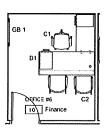


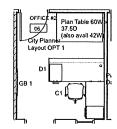
PMC Commercial Interiors

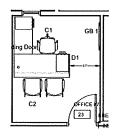
### Private Office Solution - Alt 3













# Product Solution PMC Commercial Interiors

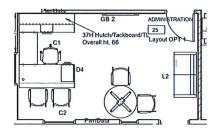
City Clerk's Office -Alt 1





PMC Commercial Interiors

### City Administrator's Office

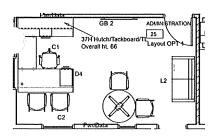


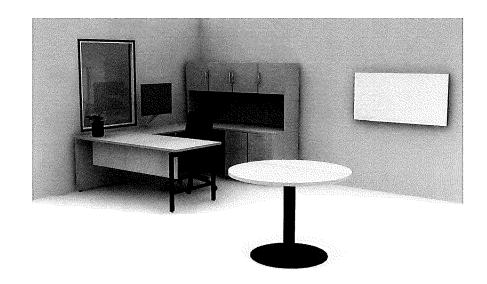
- 30d x 72w Desk Shell with 3/4 Modesty Panel
  24d x 42w Return
  24d x 72w Credenza
  Box/box/file and file/file storage
  Mounted Hutch with mounted tackboard and LED Light underneath
  42" Round Meeting Table
  SOURCE LORE Loveseat



PMC Commercial Interiors

## City Administrator's Office – Alt 1





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Office Task Chair Originally Proposed

\$423.50 Each

# AIS DEVENS

- High Back
   Mesh Back
   Grade A Seat Fabric
   Adjustable Lumbar Support
   Seat Depth Adjustment
   4-5 Arms
   10 Year Warranty



PMC Commercial Interiors

### Office Task Chair Client Requested Solution-Options

Option 1

\$782.08 ea.

Option 2

\$638.56 ea.



### VIA PROFORM

- Highback
  Iuly Upholstered in Grade B
  Vinyl
  Aluminum Loop Arm with
  Upholstered Arm Rest
  Aluminum Base

VIA PROFORM

- Highback
  Fully Upholstered in Grade B Vinyl
  8-Way Adjustable Arms
  Aluminum Base

Option 3

\$576.16 ea.

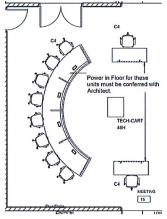


### VIA PROFORM

- Highback
  Fully Upholstered in Grade B
  Vinyl
  Way Adjustable Arms
  Black Poly Base

PMC Commercial Interiors

### Town Hall Dais







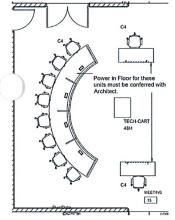
### UNIQUE CONCEPT - CUSTOM TABLE

- Semi-circular board table.
  230" x 85" x 30"h. 36"Deep
  Table Top. Full Height modesty
  and end panels. All surfaces:
  plain sliced cherry veneer &
  sollds w finish to match
  customer spec.
  4 Table Top Modules, Each has
  3 power and dual USB. Daisy
  Chain connections.
  10+ weeks lead time.



PMC Commercial Interiors

### Town Hall Dais Continued



### UNIQUE CONCEPT - CUSTOM TABLE

- Semi- circular board table.
  230" x 85" x 30"h. 36"Deep
  Table Top. Full Height modesty
  and end panels. All surfaces:
  plain sliced cherry veneer &
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  4 Table Top Modules, Each has
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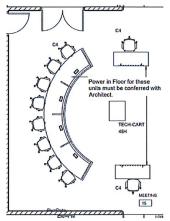




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### Council Member Chairs

\$782.08 ea





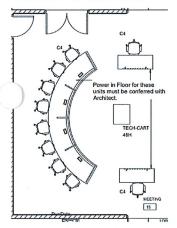


### VIA SEATING - PROFORM CHAIR

- Highback with parallel stitch lines.
  Height Adjustment, seat depth slider.
  Grade B Vinyl
  Polished Loop arm with upholstered arm cap.
  Various other arm options.

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### Tables & Lectern





### AIS Flip/Nest Table & Enwork Lectern

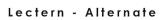
- (2) 24x60 Flip Next Table on Casters for flexibility. Enwork Zori Command Center Lectern with Tech Cabinet, 28"D x 34W, Fixed Height. Lectern Laminate Finish TBD

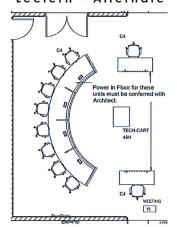


34"W Fixed Height

Depth: 28" Height: 42" Cabinet Depth: 24" Cabinet Height: 29"

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National & GL Lectern Alternates



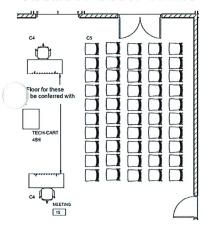






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### Chamber Guest Chairs



### SOURCE HALL CHAIR

- Upholstered Seat in Grade A Fabric
   Poly vented back
   Chrome Leg Finish
   Quoting 2 Chair Carts.













005 White Artifakt, Hall, Tier

008 Cool Grey Hall, Tier



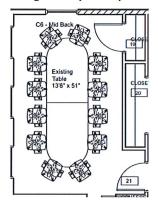




002 Dark Blue Hall, i-Stack, Tier

PMC Commercial Interiors

### Conference Room Chair Originally Proposed



### SIT ON IT PRAVA

- Fully Upholstered in Grade 2 Vinyl.
  Highback
  Enhanced Synchro tilt
  Black Base
  Carpet Casters.
  Fixed Loop Arm

\$362.40 ea





PMC Commercial Interiors

### Conference Room Chair Client Requested Solution-Options

Option 1

\$782.08 ea.

Option 2

\$638.56 ea.

Option 3

\$576.16 ea.



VIA PROFORM

- Highback
  Fully Upholstered in Grade B
  Vinyl
  Aluminum Loop Arm with
  Upholstered Arm Rest
  Aluminum Base



VIA PROFORM

- Highback
  Fully Upholstered in Grade B
  Vinyl
  B-Way Adjustable Arms
  Aluminum Base



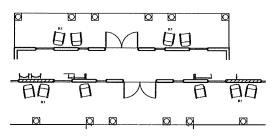
VIA PROFORM

- Highback
  Fully Upholstered in Grade B
  Vinyl
  Way Adjustable Arms
  Black Poly Base

## **Product Solution**

PMC Commercial Interiors

## Patio Furniture



## POLYWOOD ROCKING CHAIR

- Constructed of genuine
   Constructed of genuine
   POLYWOOD lumber, a
   proprietary blend of recycled
   plastics
   Durable, all-weather lumber
   not prone to splinter, crack,
   chip, peel or rot.
   3 Year Commercial Use
   Warranty.
   Additional colors available for
   an upcharge





## **Administrator**

From:

Administrator

ent:

Monday, May 17, 2021 12:20 PM

To:

Manish Venugopal

**Subject:** 

RE: Plumbing Fixtures Submittal Reviewed by EOR- Marvin Village Hall

**Importance:** 

High

## Manish:

Plumbing questions:

- 1) We meet at 2pm today, but upon my intial review...this is what I think they will not like:
  - a. Pg 21-Sink
  - b. Pg 23 and 31-faucet
  - c. Pg 26—We thought the bathrooms had nicer solid stone type finish. Is this in all the bathrooms or just staff bathrooms?

If you can provide me a few options for these pages, that would be most helpful. If not, please direct me where to look to get ideas on other options. They will likely be willing to do a change order to pay for upgrades on these items, but I need to know where to look if you don't give me any options before 2.

Please advise asap.

Thanks!

A

From: Manish Venugopal <Manish@Randolph-Sons.serverdata.net>

Sent: Thursday, May 06, 2021 2:13 PM

To: Administrator <administrator@marvinnc.gov>; Marvin NC Manager <manager@marvinnc.gov>

Cc: Jonathan Mychaluk < jonathan@urbanaia.com>; Jeff Randolph < Jeff@randolphbuilders.com>; John Urban

<johnurban@urbanaia.com>

Subject: RE: Plumbing Fixtures Submittal Reviewed by EOR- Marvin Village Hall

Christina,

Reviewed & Partially Approved submittals on plumbing & electrical by architect/EOR. Kindly mark the fixtures which you need us to find an alternate & which ones you are approving.

Thank you. Have a great day.

Regards,

Manish Venugopal,

Project Manager,

Contact: 704-550-1383

Email: Manish@Randolphbuilders.com





# HOP DRAWING REVIEW SHEET

Job Name: Marvin Town Hall Design Update

VPCE #: 4947.00

Description: Plumbing Fixtures

<u>Comments:</u> Fixtures reviewed for code compliance only. Coordinate exact style and color with Arch/Owner prior to ordering.

P-1	Reviewed as Noted:  No exceptions taken. Alternate subject to get approval by Owner/Arch.
P-1A	Reviewed as Noted:  No exceptions taken. Alternate subject to get approval by Owner/Arch.
P-1B	Reviewed as Noted:  No exceptions taken. Alternate subject to get approval by Owner/Arch.
P-2	No Exceptions Taken
P-2A	Reviewed as Noted:  No exceptions taken. Alternate subject to get approval by Owner/Arch.
P-3	Resubmit as Noted     P-3 does not meet ADA requirements. Provide as specified or submit alternate for approval.
P-4	Reviewed as Noted:  No exceptions taken. Alternate subject to get approval by Owner/Arch.
P-6	<ul> <li>Reviewed as Noted:</li> <li>Provide a 1.0 GPF sensor flushometer battery powered. Please provide a Sloan model 8186 -1.0 - DFB or equivalent.</li> </ul>
FD-1	Reviewed as Noted:  P.C. to coordinate size with plumbing plans.
FCO	Reviewed as Noted:  • P.C. to coordinate size with plumbing plans.



## SHOP DRAWING REVIEW SHEET

GCO	Reviewed as Noted:  P.C. to coordinate size with plumbing plans.	
WCO	Reviewed as Noted:  P.C. to coordinate size with plumbing plans.	
FPHB	Reviewed as Noted:  No exceptions taken. Alternate subject to get approval by Owner/Arch.	
WH-1	No Exceptions Taken	
WH-2	No Exceptions Taken	

	Reviewed
	Reviewed as Noted
	Rejected
Χ	Resubmit as Noted

This review was performed only for general conformance with the design concept of the project and general compliance with the information given in the Construction Documents. Any substitutions must meet or exceed the design intent and be properly coordinated with all affected trades. Modifications or comments made on this shop drawing during this review do not absolve the contractor from compliance with the requirements of the plans and specifications. Review of a specific item does not include approval of the assembly of which the item is a component. The contractor is responsible for the following: dimensions to be confirmed and coordinated on the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences, and procedures of construction; coordination of the work of all trades; quantities of items; and for performing all work in a safe satisfactory and timely manner.

Reviewed By: John Konstantakis

Date: 04/22/2021





BUILDERS, INC.

Mailing:

P.O. Box 410283

Charlotte, NC 28241

Shipping:

1010 Culp Road Pineville, NC 28134

Phone (704) 588-7116 Fax: (704) 588-8280

Marvin Village Hall SUBMITTAL COVER 04/19/2021

## **CONTRACTOR:**

Randolph and Son Builders Inc 1010 Culp Rd Charlotte NC 28134

## **SUBCONTRACTOR:**

TDR Plumbing, 7900 Stevens Mill Rd Suite D #10, Mathews NC 28104

## **SUPPLIERS:**

## **MANUFACTURER:**

In the submittal

## SUBMITTAL INFORMATION:

Plumbing Review-01 Division 15 Plumbing Submittals per schedule

# Shop Drawing Review

Exceptions Noted (Do Not Resubmit)

No Exceptions Noted

Revise And Resubmit

Rejected

Not Required - Returned Without Action

Review and approval are only for conformance with the information given and the design concept of the project as expressed in the Contract Documents. Review and approval of submittals are not conducted for the purpose of of determining accuracy and completeness of other details, such as dimensions and quantities, or for substantiating instructions for the installation or performance of equipment or systems, all of which remain the responsibility of the contractor as required by the Contract Documents. The Architect's review and approval of the Contractor's submittals shall not relieve the Contractor from any obligation contained in the Contract Documents.

URBAN ARCHITECTURAL GROUP P.A. DATE:

BY: Jonathan Mychaluk PROJECT: 2020-66

SHOP DRAWING REVIEW	
REVIEW IS FOR GENERAL COMPLIANCE W	/ITH
CONTRACT DOCUMENTS NO RESPONSIBIL	ITY IS
ASSUMED FOR CORRECTNESS OF DIMENSION	NS OR
DETAILS	
NO EXCEPTION TAKEN	X
MAKE CORRECTIONS NOTED	

**AMEND & RESUBMIT** REJECTED SEE REMARKS SEE NOTES AND OR COMMENTS RANDOLPH & SON BUILDERS, INC. Date: 04/19/2021 By: MV

Div: 15 Scope: Plumbing



## MARVIN VILLAGE HALL

# **MARVIN VILLAGE HALL**

## **TDR PLUMBING**

NAME

Cheryl Major

**EMAIL** 

cdmajor@winnelson.com

**PHONE** 

7049454699

FAX

7049443878

**ADDRESS** 

8800 Monroe Rd Charlotte NC, 28212





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VENDOR	DESCRIPTION	PAGE
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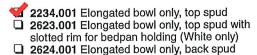


## MADERA™ FloWise® 15" HEIGHT **ELONGATED FLUSHOMETER TOILET**

VITREOUS CHINA LESS EVERCLEAN®

## MADERAT FloWise® 15" HEIGHT ELONGATED LESS EVERCLEAN®

- · Floor mount flushometer valve toilet
- · Vitreous china
- High Efficiency, Low Consumption. Operates in the range of 1.1 gpf to 1.6 gpf (4.2 Lpf to 6.0 Lpf)
- Meets definition of HET (High Efficiency Toilet) when used with a high efficiency flush valve (1.28 gpf or 1.6 / 1.1 gpf dual flush)
  • Fully glazed 2-1/8" trapway
- Elongated bowl
- 10" or 12" roughing-in
- 15" rim height
- Condensation channel
- Powerful direct-fed siphon jet action
- 10" x 12" water surface area
- 1-1/2" inlet spud
- 2 bolt caps
- · 100% factory flush tested



System MaP\* Score:

- 1,000 grams of miso @ 1.1 gpf, 1.28 gpf or 1.6 gpf when used with an American Standard flush valve
  - Maximum Performance (MaP) testing performed by IAPMO R&T Lab. MaP Report conducted by Veritec Consulting, Inc. and Koeller and Company.

**Component Parts:** 

☐ 047007-0070A Inlet Spud (furnished with bowl) ☐ 481310-100 Bolt caps with retainers (furnished with bowl)

## **Nominal Dimensions:**

718 x 356 x 381mm (28-1/4" x 14" x 15")

Fixture only, less seat and flush valve

Recommended working pressure-between 25 psi at valve when flushing and 80 psi static

## **Compliance Certifications -**

Meets or Exceeds the Following Specifications:

 ASME A112.19.2-2008 / CSA B45.1-08 for Vitreous China Fixtures



SEE REVERSE FOR ROUGHING-IN DIMENSIONS

## To Be Specified:

- ☐ Color: ☐ White ☐ Bone
- ☐ Seat:
  - ☐ American Standard #5901.100 Heavy duty open front less cover
  - ☐ American Standard #5905.100 Extra heavy duty open front less cover
- ☐ Flushometer Valve:
  - ☐ 1.6 gpf:
  - ☐ Sensor-Operated: American Standard Selectronic® DC Power #6065.161.002 (Top Spud)
  - ☐ Sensor-Operated: American Standard Selectronic® AC Power #6067.261.002 (Back Spud)
  - ☐ Manual: American Standard #6047.161.002 (Top Spud)
  - ☐ 1.28 gpf:
  - ☐ Sensor-Operated: American Standard Selectronic® DC Power #6065.121.002 (Top Spud)
  - ☐ Sensor-Operated: American Standard Selectronic® AC Power #6067.221.002 (Back Spud)
  - ☐ Manual: American Standard #6047.121.002 (Dug2 qoT)
  - ☐ 1.6 / 1.1 gpf Dual Flush:
    - ☐ Sensor-Operated: American Standard Selectronic® DC Power #6065.761.002 (Top Spud)



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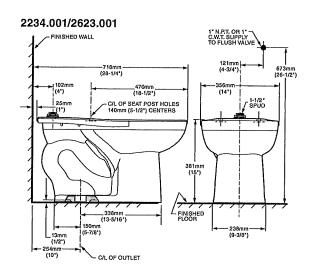




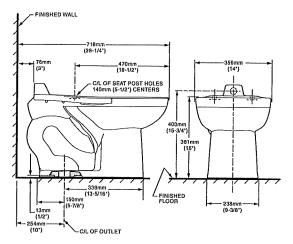


## MADERA™ FloWise® 15" HEIGHT ELONGATED FLUSHOMETER TOILET

VITREOUS CHINA LESS EVERCLEAN®



#### 2624.001



NOTES:
PRODUCT 2234 SHOWN, 2623 SAME EXCEPT WITH SLOTTED RIM FOR BED PAN HOLDING.
TO COMPLY WITH AREA CODE GOVERNING THE HEIGHT OF VACUUM BREAKER ON THE FLUSHOMETER VALVE, THE PLUMBER MUST VERIFY DIMENSIONS SHOWN FOR SUPPLY ROUGHING. THIS TOILET DESIGNED TO ROUGHINA TA MINIMUM DIMENSION OF 254MM (10") AND A MAXIMUM DIMENSION OF 305MM (12") FROM FINISHED WALL TO C/L OF OUTLET.
FLUSHOMETER VALVE NOT INCLUDED WITH FIXTURE AND MUST BE ORDERED SEPARATELY, FLUSHOMETER VALVE REQUIREMENTS FOR 12" (305MM) ROUGH-IN: SWEAT EXTENSION NIPPLE IS REQUIRED. REFER TO VALVE MANUFACTURER AND LOCAL CODES.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.

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#### **CODE NUMBER**

3790011

#### DESCRIPTION

1.6 gpf, Polished Chrome Finish, Single Flush, Electrical Override, Battery, Sloan® Exposed Sensor Water Closet Flushometer.

#### DETAILS

- Flush Volume: 1.6 gpf (6.0 Lpf)
- Finish: Polished Chrome (CP)
- Power Type: Battery
- · Battery Life: 6 years
- · Valve: Diaphragm
- Valve Body Material: Semi-red Brass
- Fixture Type: Water Closet
- Fixture Connection: Top spud
- Rough-In Dimension: 11 1/2" (292mm)
- Spud Coupling: 1 1/2" (38mm)
- Supply Pipe: 1" (25mm)
- · Override: Electrical (OR)

#### **FEATURES**

- High Chloramine Resistant PERMEX® Synthetic Rubber Diaphragm with Linear Filtered Bypass and Vortex Cleansing ActionTM
- 1" I.P.S. Screwdriver Bak-Chek® Angle Stop with Vandal Resistant Stop Cap
- Vacuum Breaker with Flush Connection
- Spud Coupling and Spud Flange for 11/2" Top Spud
- Sweat Solder Adapter with Cover Tube and Cast Wall Flange
- User friendly three (3) second Flush Delay
- No External Volume Adjustment to Ensure Water Conservation
- Stop Seat and Vacuum Breaker Molded from PERMEX® Rubber Compound for Chloramine resistance
- Infrared Sensor with Multiple-focused, Lobular Sensing Fields for high and low target detection
- Engineered Plastic Cover with replaceable Lens Window
- Courtesy Flush® Override Button
- Four (4) Size AA Batteries included

# SLOAN® SENSOR FLUSHOMETER SLOAN 8111-1.6-OR



#### **COMPLIANCES & CERTIFICATIONS**







(ADA Compliant, cUPC Certified, BAA Compliant)

## RECOMMENDED SPECIFICATION

Valve Body, Cover, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi- Red Brass. Valve shall be in compliance with the applicable sections of ASSE 1037 and ANSI/ASME 112.19.2.

## **ELECTRICAL SPECIFICATIONS**

· Battery Life: 6 years

## **VALVE OPERATING PRESSURE (FLOWING)**

15-80 PSI (103-552 kPa). Specific fixtures may require greater minimum flowing pressure - consult manufacturer requirements.

#### **DOWNLOADS**

- G2 Optima Plus Installation Instructions
- Control Stop Repair and Maintenance Guide
- Flush Connections Flanges Repair and Maintenance Guide
- Tail Piece Repair and Maintenance Guide
- Sloan Optima Plus Repair and Maintenance Guide
- Flushometer Pressure gauges
- Additional Downloads

#### NOTES

All information contained within this document subject to change without notice.

Looking for other variations of the SLOAN 8111 product? View the general spec sheet with all options.

Find a compatible urinal for this flushometer. Find a compatible water closet for this flushometer.

Sloan 10500 Seymour Ave, Franklin Park, IL 60131 Phone: 800.982.5839 • Fax: 800.447.8329 • sloan.com

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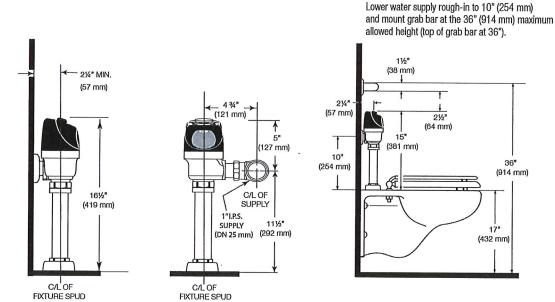




# SLOAN® SENSOR FLUSHOMETER SLOAN 8111-1.6-OR

ALTERNATE ADA INSTALLATION

## **ROUGH-IN**



## WHEN INSTALLING IN A HANDICAP STALL:

Per the ADA Guildlines (section 604.9.4) it is recommended that the grab bars be split or shifted to the wide side of the stall. If grab bars must be present over the valve, use the alternate ADA installation as shown to the right.

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## **COMMERCIAL TOILET SEATS**

## **COMMERCIAL TOILET SEATS**

**5901.100** 

Elongated Heavy Duty bowl open front seat

less cover

□ 5901.110T

□ 5901.100SS Same as 5901.100 with self-sustaining hinge Same as 5901.100 with EverClean® Surface

☐ **5901.110T5** Master Pack of 5 - 5901.110T seats individually

boxed and labeled for easy sell through

• Open front toilet seat less cover

• Injection molded solid polypropylene

· Fits elongated bowl

• Features large molded-in bumpers

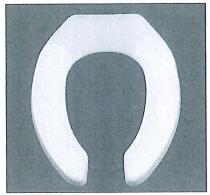
• External check hinge with 304 Series stainless steel hinge

posts stops seat 11° beyond vertical

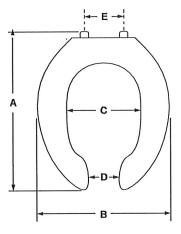
• EverClean® silver-based surface permanently inhibits the growth of stain and odor causing bacteria, mold and mildew on the surface. EverClean® surface does not protect against disease causing bacteria.

Model #	5901
Α	18-9/16" (471mm)
В	14-3/8" (365mm)
С	7-7/8" (200mm)
D	3-1/2" (89mm)
E	5-1/2" (140mm)
Ring Thickness	7/8" (22mm)
Ring Thickness with Bumper	1" (25mm)





5901



– M165 –

spec\_5901 (4/16)

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P1A

## Winnelson

VENDOR	DESCRIPTION	PAGE
American Standard	Madera 16-1/2 Univ Bowl Tp Spd Wht	12
American Standard	Heavy Duty Toilet Seat El Wht	14
Sloan	Sloan 8111	15



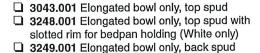


## MADERA™ FloWise® 16-1/2" HEIGHT **ELONGATED FLUSHOMETER TOILET**

VITREOUS CHINA LESS EVERCLEAN®

## MADERA'" FloWise® 16-1/2" HEIGHT ELONGATED LESS EVERCLEAN®

- · Floor mount flushometer valve toilet
- · Vitreous china
- · High Efficiency, Low Consumption. Operates in the range of 1.1 gpf to 1.6 gpf (4.2 Lpf to 6.0 Lpf)
- · Meets definition of HET (High Efficiency Toilet) when used with a high efficiency flush valve (1.28 gpf or 1.6 / 1.1 gpf dual flush)
- Fully glazed 2-1/8" trapway
- · Elongated bowl
- 10" or 12" roughing-in
- 16-1/2" rim height for accessible application
- Condensation channel
- · Powerful direct-fed siphon jet action
- 10" x 12" water surface area
- 1-1/2" inlet spud
- · 2 bolt caps
- · 100% factory flush tested



System MaP\* Score:

- 1,000 grams of miso @ 1.1 gpf, 1.28 gpf or 1.6 gpf when used with an American Standard flush valve
  - Maximum Performance (MaP) testing performed by IAPMO R&T Lab. MaP Report conducted by Veritec Consulting, Inc. and Koeller and Company.

## **Component Parts:**

- ☐ 047007-0070A Inlet Spud (furnished with bowl) ☐ 481310-100 Bolt caps with retainers
  - (furnished with bowl)

## **Nominal Dimensions:**

718 x 356 x 419mm (28-1/4" x 14" x 16-1/2")

Fixture only, less seat and flush valve

Recommended working pressure-between 25 psi at valve when flushing and 80 psi static

## **Compliance Certifications -**

## Meets or Exceeds the Following Specifications:

 ASME A112.19.2-2008 / CSA B45.1-08 for Vitreous China Fixtures



MEETS THE AMERICANS WITH DISABILITIES ACT GUIDELINES AND ANSI A117.1 REQUIREMENTS FOR ACCESSIBLE AND USABLE BUILDING FACILITIES - CHECK LOCAL CODES.



#### To Be Specified:

- ☐ Color: ☐ White ☐ Bone
- ☐ Seat:
  - ☐ American Standard #5901.100 Heavy duty open front less cover
  - ☐ American Standard #5905.100 Extra heavy duty open front less cover
- ☐ Flushometer Valve:
  - ☐ 1.6 gpf:
    - ☐ Sensor-Operated: American Standard Selectronic® DC Power #6065.161.002 (Top Spud)
    - ☐ Sensor-Operated: American Standard Selectronic® AC Power #6067.261.002 (Back Spud)
    - ☐ Manual: American Standard #6047.161.002 (Top Spud)
  - □ 1.28 gpf:
    - ☐ Sensor-Operated: American Standard Selectronic® DC Power #6065.121.002 (Top Spud)
    - ☐ Sensor-Operated: American Standard Selectronic® AC Power #6067.221.002 (Back Spud)
    - ☐ Manual: American Standard #6047.121.002 (Top Spud)
  - ☐ 1.6 / 1.1 gpf Dual Flush:
  - ☐ Sensor-Operated: American Standard Selectronic® DC Power #6065.761.002 (Top Spud)



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Rev. 2/14

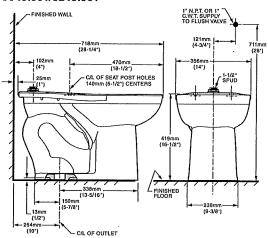
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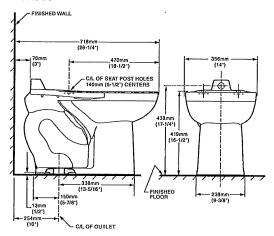
## MADERA™ FloWise® 16-1/2" HEIGHT ELONGATED FLUSHOMETER TOILET

VITREOUS CHINA LESS EVERCLEAN®

## 3043.001/3248.001



## 3249.001



NOTES:
PRODUCT 3043 SHOWN, 3248 SAME EXCEPT WITH SLOTTED RIM FOR BED PAN HOLDING.
TO COMPLY WITH AREA CODE GOVERNING THE HEIGHT OF VACUUM BREAKER ON THE FLUSHOMETER VALVE. THE PLUMBER MUST VERIFY DIMENSIONS SHOWN FOR SUPPLY ROUGHING.
THIS TOILET DESIGNED TO ROUGH-IN AT A MINIMUM DIMENSION OF 254MM (10") AND A MAXIMUM DIMENSION OF 305MM (12") FROM FINISHED WALL TO CIT. OF OUTLET.
FLUSHOMETER VALVE NOT INCLUDED WITH FIXTURE AND MUST BE ORDERED SEPARATELY. FLUSHOMETER VALVE REQUIREMENTS FOR 12" (305MM) ROUGH-IN: SWEAT EXTENSION NIPPLE IS REQUIRED. REFER TO VALVE MANUFACTURER AND LOCAL CODES.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or volded pages.

- M108 -

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## **COMMERCIAL TOILET SEATS**

## **COMMERCIAL TOILET SEATS**

5901.100

Elongated Heavy Duty bowl open front seat

less cover

□ 5901.110T

□ 5901.100SS Same as 5901.100 with self-sustaining hinge Same as 5901.100 with EverClean® Surface ☐ **5901.110T5** Master Pack of 5 - 5901.110T seats individually

boxed and labeled for easy sell through

• Open front toilet seat less cover

• Injection molded solid polypropylene

Fits elongated bowl

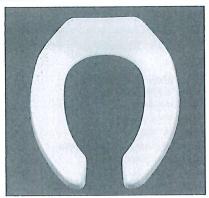
• Features large molded-in bumpers

• External check hinge with 304 Series stainless steel hinge posts stops seat 11° beyond vertical

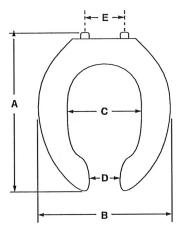
 EverClean® silver-based surface permanently inhibits the growth of stain and odor causing bacteria, mold and mildew on the surface. EverClean® surface does not protect against disease causing bacteria.

Model #	5901
Α	18-9/16" (471mm)
В	14-3/8" (365mm)
С	7-7/8" (200mm)
D	3-1/2" (89mm)
Е	5-1/2" (140mm)
Ring Thickness	7/8" (22mm)
Ring Thickness	1" (25mm)





5901



– M165 spec\_5901 (4/16)

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#### **CODE NUMBER**

3790011

#### **DESCRIPTION**

1.6 gpf, Polished Chrome Finish, Single Flush, Electrical Override, Battery, Sloan® Exposed Sensor Water Closet Flushometer.

#### DETAILS

- Flush Volume: 1.6 gpf (6.0 Lpf)
- Finish: Polished Chrome (CP)
- Power Type: Battery
- · Battery Life: 6 years
- · Valve: Diaphragm
- Valve Body Material: Semi-red Brass
- · Fixture Type: Water Closet
- · Fixture Connection: Top spud
- Rough-In Dimension: 11 1/2" (292mm)
- Spud Coupling: 1 1/2" (38mm)
- Supply Pipe: 1" (25mm)
- · Override: Electrical (OR)

#### **FEATURES**

- High Chloramine Resistant PERMEX® Synthetic Rubber Diaphragm with Linear Filtered Bypass and Vortex Cleansing ActionTM
- 1" I.P.S. Screwdriver Bak-Chek® Angle Stop with Vandal Resistant Stop Cap
- Vacuum Breaker with Flush Connection
- Spud Coupling and Spud Flange for 11/2" Top Spud
- Sweat Solder Adapter with Cover Tube and Cast Wall Flange
- User friendly three (3) second Flush Delay
- No External Volume Adjustment to Ensure Water Conservation
- Stop Seat and Vacuum Breaker Molded from PERMEX® Rubber Compound for Chloramine resistance
- Infrared Sensor with Multiple-focused, Lobular Sensing Fields for high and low target detection
- Engineered Plastic Cover with replaceable Lens Window
- Courtesy Flush® Override Button
- Four (4) Size AA Batteries included

# SLOAN® SENSOR FLUSHOMETER SLOAN 8111-1.6-OR



#### **COMPLIANCES & CERTIFICATIONS**







(ADA Compliant, cUPC Certified, BAA Compliant)

#### RECOMMENDED SPECIFICATION

Valve Body, Cover, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi-Red Brass. Valve shall be in compliance with the applicable sections of ASSE 1037 and ANSI/ASME 112.19.2.

## **ELECTRICAL SPECIFICATIONS**

• Battery Life: 6 years

## **VALVE OPERATING PRESSURE (FLOWING)**

15–80 PSI (103–552 kPa). Specific fixtures may require greater minimum flowing pressure - consult manufacturer requirements.

## **DOWNLOADS**

- G2 Optima Plus Installation Instructions
- Control Stop Repair and Maintenance Guide
- Flush Connections Flanges Repair and Maintenance Guide
- Tail Piece Repair and Maintenance Guide
- Sloan Optima Plus Repair and Maintenance Guide
- Flushometer Pressure gauges
- Additional Downloads

#### NOTES

All information contained within this document subject to change without notice.

Looking for other variations of the SLOAN 8111 product? View the general spec sheet with all options.

Find a compatible urinal for this flushometer. Find a compatible water closet for this flushometer.

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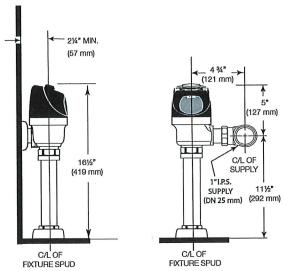
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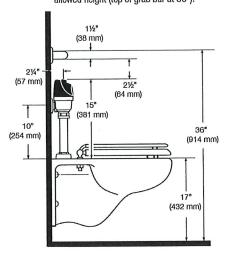


# SLOAN® SENSOR FLUSHOMETER SLOAN 8111-1.6-OR

## **ROUGH-IN**



ALTERNATE ADA INSTALLATION
Lower water supply rough-in to 10" (254 mm) and mount grab bar at the 36" (914 mm) maximum allowed height (top of grab bar at 36").



# WHEN INSTALLING IN A HANDICAP STALL: Per the ADA Guildlines (section 604.9.4) it is recommended that the grab bars be split or shifted to the wide side of the stall. If grab bars must be present over the valve, use the alternate ADA installation as shown to the right.

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## Winnelson

VENDOR	DESCRIPTION	PAGE
American Standard	Heavy Duty Toilet Seat El Wht	18
American Standard	Cadet Pro Rh Ei 12in R L/seat Wht	19







## **COMMERCIAL TOILET SEATS**

## **COMMERCIAL TOILET SEATS**

**5901.100** 

Elongated Heavy Duty bowl open front seat

less cover

□ 5901.110T

□ 5901.100SS Same as 5901.100 with self-sustaining hinge Same as 5901.100 with EverClean® Surface

□ 5901.110T5 Master Pack of 5 - 5901.110T seats individually

boxed and labeled for easy sell through

Open front toilet seat less coverInjection molded solid polypropylene

• Fits elongated bowl

• Features large molded-in bumpers

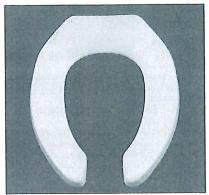
External check hinge with 304 Series stainless steel hinge

posts stops seat 11° beyond vertical

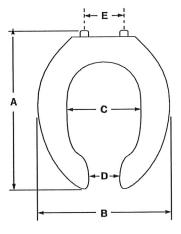
• EverClean® silver-based surface permanently inhibits the growth of stain and odor causing bacteria, mold and mildew on the surface. EverClean® surface does not protect against disease causing bacteria.

Model #	5901
Α	18-9/16" (471mm)
В	14-3/8" (365mm)
С	7-7/8" (200mm)
D	3-1/2" (89mm)
E	5-1/2" (140mm)
Ring Thickness	7/8" (22mm)
Ring Thickness with Bumper	1" (25mm)





5901



– M165 –

spec\_5901 (4/16)

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## **UAG:** verify trip lever location



## CADET® PRO™ RIGHT HEIGHT® **ELONGATED TOILET**

VITREOUS CHINA

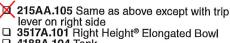
## **CADET® PRO™ RIGHT HEIGHT® ELONGATED TOILET**

## **215AA.104**

**BARRIER FREE** 

- Features the Cadet® Flushing System
- Vitreous china
- High Efficiency Toilet (HET), ultra-low consumption (4.8 Lpf/1.28 gpf), utilizes 20% less water
- Meets EPA WaterSense® criteria
- Trade exclusive tank
   PowerWash® rim scrubs bowl with each flush
- Robust metal trip lever & metal shank fill valve
- Includes EZ-Install Tools w/color match bowl caps
- EverClean® surface included
- 3" flush valve
- 3 ilusti vaive
   Fully-glazed 2-1/8" trapway
   16-1/2" rim height for accessible applications
   12" (305mm) rough-in
   Generous 9" x 8" water surface area

- Chrome finish trip lever is supplied
- 1,000g MaP Score\*\* at 1.28 gpf
- 5 year warranty



☐ 4188A.104 Tank

## **Nominal Dimensions:**

767 x 441 x 771mm (30-1/8" x 17-3/8" x 30-3/8")

Fixture only, seat and supply sold separately

## **Alternative Tank Configurations Available:**

- ☐ 4188A.154 Tank complete with Aquaguard Liner ☐ 4188A.155 Tank complete with Aquaguard Liner and trip lever located on right side
- 4188A.164 Tank complete with tank cover
- □ 4188A.104 rain complete with Aquaguard Liner and tank cover locking device
- ☐ 4188A.105 Tank complete with trip lever located on right side
- ☐ 4188A.165 Tank complete with tank cover locking device and trip lever located on right side

#### Compliance Certifications -

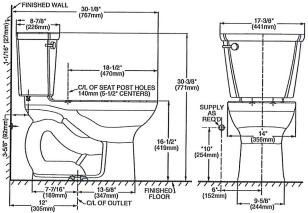
## Meets or Exceeds the Following Specifications:

- ASME A112.19.2-2008/CSA B45.1-08 for Vitreous China Fixtures
- US EPA WaterSense® Specification for HETs
- \*\* Maximum Performance (MaP) testing performed by IAPMO R&T Lab. MaP Report conducted by Veritec Consulting, Inc. and Koeller and Company.

## To Be Specified:

- ☐ Color: ☐ White ☐ Bone ☐ Linen ☐ Black ☐ Seat: #5321.110 EverClean® Elongated Seat with Slow Close Snap-Off Hinges
- ☐ Supply with stop:





THIS TOILET IS DESIGNED TO ROUGH-IN AT A MINIMUM DIMENSION OF 305MM (12") FROM FINISHED WALL TO C/L OF OUTLET. SUPPLY NOT INCLUDED WITH FIXTURE AND MUST BE ORDERED SEPARATELY. \* DIMENSION SHOWN FOR LOCATION OF SUPPLY IS SUGGESTED.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.



MEETS THE AMERICANS WITH DISABILITIES ACT QUIDELINES AND ANSI A117.1 REQUIREMENTS FOR ACCESSIBLE AND USABLE BUILDING FACILITIES-CHECK LOCAL CODES.





K168

Rev. 6/13

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P2

# UAG: review finishes with owner

VENDOR	DESCRIPTION	PAGE
Kohler	Bachata Drop-in/undermount Bathroom Sink With Mirror Finish And Overflow - Not Applicable	21
Sloan	Optima Battery Powered, Deck Mounted, Ir Faucet With Vandal Resistant Cast Brass Integrated Base, 0.5	23
	Gpm, 4" Centerset Install, Polished Chrome	





# **KOHLER**

Bachata<sup>®</sup>

Bathroom Sink K-2609-MU

## **Features**

- Oval basin.
- Unique overflow drain.
- No faucet holes; requires wall- or counter-mount faucet.
- Fits standard 14- x 17-inch countertop cutout.

## Material

20-gauge stainless steel.

## Installation

Drop-in or under-mount.

## Required Products/Accessories

K-7114-A Pop-Up Drain

or

K-7126 Standard pop-up drain, non-exposed, with lift rod

or

K-7124-A Pop-Up Clicker Drain

or

K-7127-A Drain

or

K-7128-A Drain

or

K-7129-A Drain

or

K-7131-A Offset Drain

## Recommended Products/Accessories

K-8998 P-Trap

## **Included Components**

Additional Components: 1193643 Basin Clamps Cutout template.



ADA CSA B651

## Codes/Standards

ASME A112.19.3/CSA B45.4 ADA ICC/ANSI A117.1 CSA B651

## KOHLER® One-Year Limited Warranty

See website for detailed warranty information.



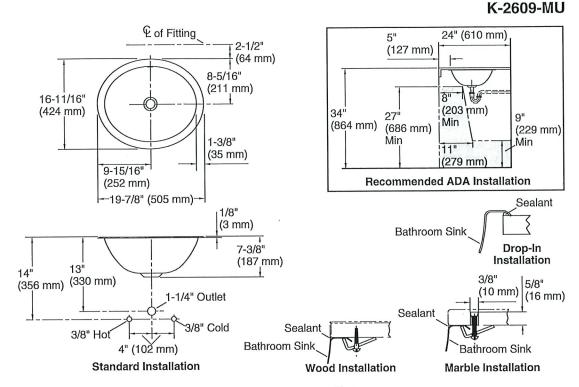




# **KOHLER**

## **Bachata®**

Bathroom Sink



## **Technical Information**

All product dimensions are nominal.

Installation:

Drop-in, Under-mount

Bowl area:

Length: 17-3/8" (441 mm)

Width: 14" (356 mm)

With overflow: Yes

Water depth: 4-1/16" (103 mm)

Drain hole:

1-5/8" (41 mm)

Template:

1248333-7, required, included

## Notes

Install this product according to the installation instructions.

Installer must supply anchors based on countertop material and thickness.

ADA, CSA B651 compliant when installed to the specific requirements of these regulations.









## Optima® Sensor Activated 4 inch Centerset Faucet EBF-650

## ▶ Code Number

3315025

#### ▶ Description

Battery Powered, Sensor Activated, Chrome Plated Brass, 4" Centerset Electronic Hand Washing Faucet for tempered or hot/cold water operation.

#### ▶ Flow Rates

0.5 gpm/1.9 Lpm Vandal Resistant Spray Head

## ▶ Specifications

ADA Compliant, Battery Powered, Sensor Activated, Chrome Plated Cast Brass, 4" Centerset Hand Washing Faucet with the following features:

- Appropriate Mounting Hardware included
- Splash-proof Circuit Control Module
- Serviceable Filtered Solenoid Valve
- Vandal Resistant Spray Head with Pressure Compensating Flow Control
- Sensor Range Adjustment Screw
- User Friendly Variable Time Out Settings
- Low Battery LED Indicator Light
- Metal Jacketed Wire Protection for Sensor lead
- Includes four (4) AA-size Alkaline Batteries
- Optional 6 VDC Plug-in Adapter available (Batteries act as backup when using optional transformer)

## ► Indicator Lights

Range Adjustment

## ► Sensor Range

Factory Set: 4" - 5" (102 mm - 127 mm)

Adjustable: 2" - 7" (51 mm - 178 mm)

## ▶ Battery Life

2 Years @ 8,000 Flushes / Month

#### ► Control Circuit

Optional 6 VDC Plug-in Adapter.

6 VDC — operates on four (4) alkaline AA-size batteries. Optional 6 VDC Plug-in Adapter.

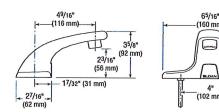
#### ▶ Solenoid Valve

Filtered Solenoid Valve with Serviceable Strainer Filter

## ► Time Out Adjustment Settings

30 seconds — The Faucet Time Out Setting determines the maximum time the faucet will run upon continuous detection. The EBF-650 is Factory set at the 30 second time out. Consult factory for time out settings to meet individual application requirements.





## ► Automatic Operation

The Sloan OPTIMA Plus® EBF-650 Battery Powered Hand Washing Faucet activates by means of an infrared sensor. Once the user's hands enter the sensor's effective range, the solenoid activates the water flow. Tempered water flows from the faucet until hands are moved away. The faucet then automatically shuts off.

## ▶ Hygienic

The ultimate in sanitary protection — there are no handles to turn or buttons to push. Helps to control the spread of infectious diseases. Ideal for high traffic commercial installations.

#### ► Economical

Automatic operation provides water usage savings over other faucet devices. Reduces maintenance and operation costs. The 4-inch centerset design makes the EBF-650 Faucet secure against abuse and vandalism. Battery powered ideal for retrofit installations. Optional plug-in adapter available.

#### ► Compliance & Certifications



This space for Architect/Engineer Approval

#### ► ROUGH-IN

EBF-650 Faucet with Bak-Chek® Tee for Hot and Cold Water Supply

SLOAN 10500 SEYMOUR AVE. • FRANKLIN PARK, • IL. 60131
Ph: 1-800-9-VALVE-9 or 1-847-671-4300 • Fax: 1-800-447-8329 or 1-847-671-4380 • http://www.sloan.com

2017-22-05

Page 1 of 2

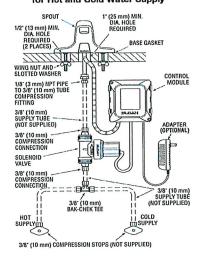




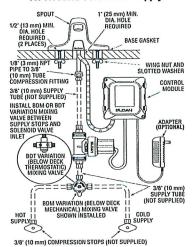


## Optima® Sensor Activated 4 inch Centerset Faucet EBF-650

# EBF-650 Faucet with Bak-Chek® Tee for Hot and Cold Water Supply



# EBF-650 Faucet with BDM and BDT Variation Mixing Valves for Hot and Cold Water Supply



P<sub>2</sub>A



# UAG: review finishes with owner

VENDOR	DESCRIPTION	PAGE
American Standard	Lucerne Wall-hung Lava 4 In Ctrs Wht	26
Delta	Foundations: Two Handle Centerset Bathroom Faucet - Stainless	29







## **LUCERNE™** WALL-HUNG LAVATORY **VITREOUS CHINA**

## **BARRIER FREE**

## LUCERNE™ WALL-HUNG LAVATORY

- Wall-hung sink
- Vitreous china
- Front overflow
- D-shaped bowl
- Self-draining deck area with contoured back and side splash shields
- Faucet ledge
- Compliant with Texas accessibility standard (TAS) for children age group 13 and up

## Faucet holes on 203mm (8") centers (Illus.):

- 0356.028 For exposed bracket support Shown with 4801.862 Amarilis Heritage faucet with Triune Cross handles (not included)
- ☐ 0356.015 For wall hanger (included) or concealed arms support
- □ 0356.915 For wall hanger (included) or concealed arms support
  - · Less overflow

- Faucet holes on 102mm (4") centers:

  0355.027 For exposed bracket support
  0355.012 For wall hanger (included) or concealed arms support
- □ 0355.912 For wall hanger (included) or concealed arms support
  - · Less overflow

## Single center faucet hole (Illus.):

- ☐ 0356.041 For exposed bracket support Shown with 1340,000 metering faucet (not included)
- □ 0356.421 For wall hanger (included) or concealed arms support
- □ 0356.921 For wall hanger (included) or concealed arms support
  - Less overflow
- □ 0356.439 For wall hanger (included) or concealed arms support
  - · Single faucet hole on right
- ☐ 0356.066 For exposed bracket support
  - · Single faucet hole on right

## **Nominal Dimensions:**

521 x 464mm

(20-1/2" x 18-1/4")

## Bowl sizes:

381mm (15") wide

254mm (10") front to back

165mm (6-1/2") deep

#### Compliance Certifications -Meets or Exceeds the Following Specifications:

 ASME A112.19.2 / CSA B45.1 for Vitreous China Fixtures



0356.028

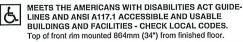


0356.041

## SEE FOLLOWING PAGES FOR ROUGHING-IN DIMENSIONS

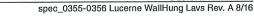
## To Be Specified:

- ☐ Color: ☐ White
- ☐ Faucet\*:
- ☐ Faucet Finish:
- ☐ Supplies: ☐ 1-1/4" Trap:
- ☐ Nipple:
- ☐ Bracket Support (by others):
- ☐ Concealed Arms Support (by others):
- \* See faucet section for additional models available



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M37









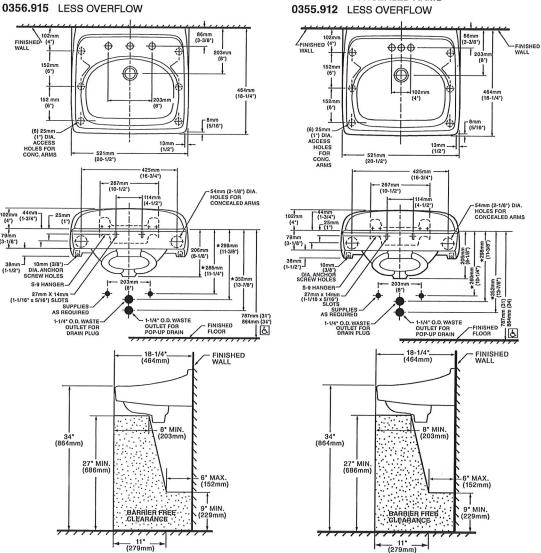
## **LUCERNE™ WALL-HUNG LAVATORY VITREOUS CHINA**

**&** BARRIER FREE

0356.028 8" CTRS FOR EXPOSED BRACKET SUPPORT 0356.015 8" CTRS FOR WALL HANGER

OR CONCEALED ARMS

0355.027 4" CTRS FOR EXPOSED BRACKET SUPPORT 4" CTRS FOR WALL HANGER OR CONCEALED ARMS 0355.012



NOTES:
\* DIMENSIONS SHOWN FOR LOCATION OF SUPPLIES AND "P" THAP ARE SUGGESTED. PROVIDE SUITABLE REINFORCEMENT FOR ALL WALL SUPPORTS. FITTINGS NOT INCLUDED AND MUST BE ORDERED SEPARATELY. CONCEALED ARM SUPPORT AS REQUIRED TO BE FURNISHED BY OTHERS.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.

LAVATORY DESIGNED TO MEET ADA HANDICAPPED GUIDELINES WITH MOUNTING HEIGHT SET AT 864MM (34") ABOVE FINISHED FLOOR.

M38

PART OF LIXIL

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## **LUCERNE™ WALL-HUNG LAVATORY**

& BARRIER FREE

VITREOUS CHINA

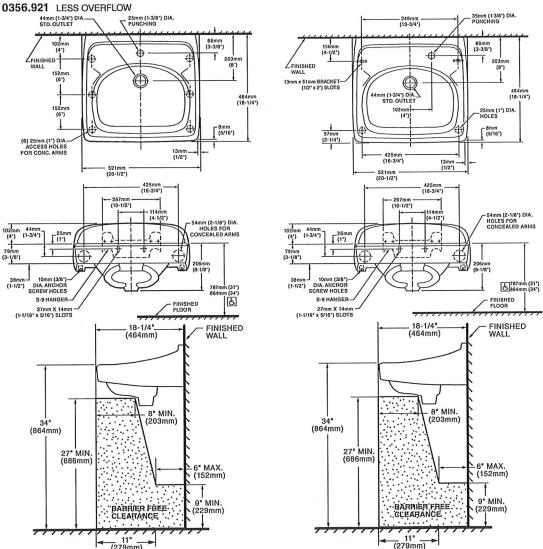
0356.041 SINGLE CENTER HOLE FOR EXPOSED BRACKET SUPPORT

0356.421 SINGLE CENTER HOLE FOR WALL

HANGER OR CONCEALED ARMS

SINGLE CENTER HOLE ON RIGHT FOR WALL 0356.439 HANGER OR CONCEALED ARMS

0356.066 SINGLE CENTER HOLE ON RIGHT FOR EXPOSED BRACKET SUPPORT



NOTES:
\* DIMENSIONS SHOWN FOR LOCATION OF SUPPLIES AND "P" TRAP ARE SUGGESTED.
PROVIDE SUITABLE REINFORCEMENT FOR ALL WALL SUPPORTS.
FITTINGS NOT INCLUDED AND MUST BE ORDERED SEPARATELY.
CONCEALED ARM SUPPORT AS REQUIRED TO BE FURNISHED BY OTHERS.

IMPORTANT: Dimensions of fixtures are nominal and may vary within the range of tolerances established by ANSI Standard A112.19.2. These measurements are subject to change or cancellation. No responsibility is assumed for use of superseded or voided pages.

LAVATORY DESIGNED TO MEET ADA HANDICAPPED GUIDELINES WITH MOUNTING HEIGHT SET AT 864MM (34") ABOVE FINISHED FLOOR.

PART OF LIXIL

M39

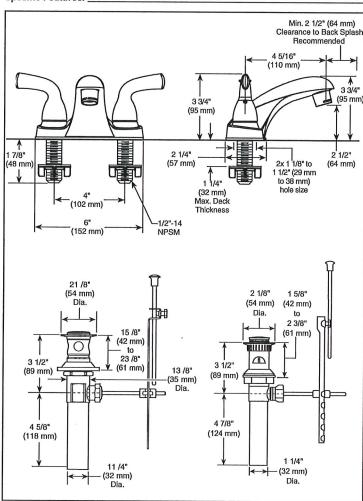
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spec\_0355-0356 Lucerne WallHung Lavs Rev. A 8/16



Submitted Model No.:

Specific Features:



▲ Designate proper finish suffix



see what Delta can do-

## **LAVATORY FAUCET**

■ Two Handle Deck Mount

#### **STANDARD SPECIFICATIONS:**

- Maximum 1.2 gpm @ 60 psi, 4.5 L/min @ 414 kPa
- Three hole mount
- 1/4 turn handle stops
- Hot and cold stems are interchangeable
- Lever handle control mechanism is a rotating cylinder type with stainless steel plate and 90° rotating with replaceable non-metallic seats

## **WARRANTY:**

- Lifetime limited warranty on parts (other than electronic parts and batteries) and finishes: or, for commercial users, for 5 years from date of purchase.
- 5 year limited warranty on electronic parts (other than batteries); or, for commercial users, for 1 year from the date of purchase. No warranty is provided on batteries.



#### **COMPLIES WITH:**

- ASME A112.18.1 / CSA B125.1
- ASME A112.18.2 / CSA B125.2
- Indicates compliance to ICC/ANSI A117.1
- EPA WaterSense®
- Verified compliant with 0.25% weighted average Pb content regulations

Delta reserves the right (1) to make changes in specifications and materials, and (2) to change or discontinue models, both without notice or obligation. Dimensions are for reference only. See current full-line price book or www.deltafaucet.com for finish options and product availability.

DSP-L-B2510LF Rev. E

Delta Faucet Company 55 E. ITTH Street, Indianapolis, IN 46280 350 Soxth Edgeware Road, St. Thomas, ON NSP 4LI © 2017 Delta Faucet Company





VENDOR	DESCRIPTION	PAGE
Elkay	Gourmet (lustertone) Stainless Steel Single Bowl Undermount Sink	3.
American Standard	Colony Pro Kit W Spray Thru Deckplate Ss	33







### Gourmet Undermount Single Bowl Sink Model ELUH2115 Series

### IMPORTANT! ELU / ELUH Update

ELUH models have been redesigned to accommodate 1/2" reveal and no reveal installation options. ELU models should be ordered as ELUH.

#### **GENERAL**

Highest quality sink formed of #18 (1.2mm) gauge, type 304 (18-8) nickel bearing stainless steel. Select models available with Statement feature. Undermount.

#### **DESIGN FEATURES**

Bowl Depth: 7-1/2" (191mm) (ELUH2115), 10" (254mm) (ELUH211510).

Coved Corners: 1-3/4" (44mm) vertical and horizontal radius. Finish: Exposed surfaces are hand blended to a Lustrous Highlighted Satin finish.

Underside: Underside of sink is fully protected by heavy duty Sound Guard® undercoating to reduce condensation and dampen sound.

### **OTHER**

Drain Opening: 3-1/2" (89mm).

Note: All Elkay undermount sinks are designed to affix to the underside of any solid surface countertop.

Sink complies with ASME A112.19.3/ CSA B45.4



Sinks are listed by IAPMO® as meeting the applicable requirements of the Uniform Plumbing Code®, International Plumbing Code of Canada.

### **OPTIONAL ACCESSORIES**

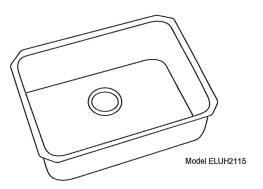
Bottom Grid: LKWOBG2115SS

Cutting Board: (Reveal mount only) CB1516

Drain: LK99

Rinsing Baskets: LKWRB2115SS, LKWERBSS Utensil Caddy for Rinsing Basket: LKWUCSS

Mounting Clip: LKUCLIP8





### SINK PACKAGE(S)

MODEL	SINK	<b>BOTTOM GRID</b>	QTY	DRAIN	QTY	
ELUH2115DBG	ELUH2115	LKWOBG2115SS	1	LK99	1	
ELUH211510DBG	ELUH211510	LKWOBG2115SS	1	LK99	1	
MODEL	SINK	FAUCET	QTY			

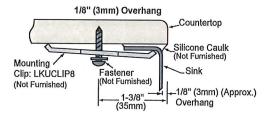
MODEL SINK FAUCET QTY

LKGTPKG1CR ELUH2115 LKGT1041CR 1

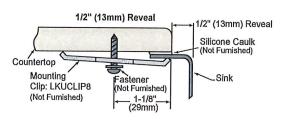
LKGTPKG1NK ELUH2115 LKGT1041NK 1



Installation Profile



In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets.



This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

Elkay elkay.com 2222 Camden Court Oak Brook, IL 60523

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## **Gourmet Undermount Single Bowl Sink Model ELUH2115 Series**

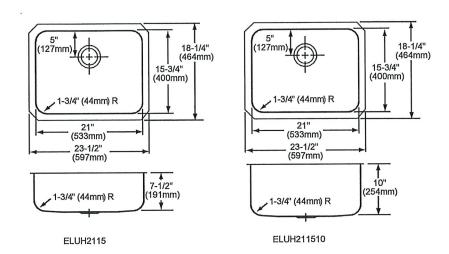


### SINK DIMENSIONS\*

Model	Ove	rall		inside Bowl		Cutout In	Minimum Cabinet	
Number	L	W	L	W	D	Countertop	Size	
ELUH2115	23 <sup>1</sup> / <sub>2</sub> (597mm)	18 <sup>1</sup> / <sub>4</sub> (464mm)	21 (533mm)	15 <sup>3</sup> / <sub>4</sub> (400mm)	7 <sup>1</sup> / <sub>2</sub> (191mm)	See	27 (686mm)	
ELUH211510	23 <sup>1</sup> / <sub>2</sub> (597mm)	18 <sup>1</sup> / <sub>4</sub> (464mm)	21 (533mm)	15 <sup>3</sup> / <sub>4</sub> (400mm)	10 (254mm)	Template**	27 (686mm)	

<sup>\*</sup>Length is left to right. Width is front to back.

\*\*Template #1000001400 is packed with every sink.



In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets.

This specification describes an Elikay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

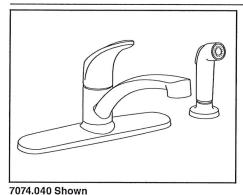
Elkay elkay.com 2222 Camden Court Oak Brook, IL 60523 © 2014 Elkay (Rev. 05/14) 1-112O







# COLONY® PRO SINGLE CONTROL KITCHEN FAUCET

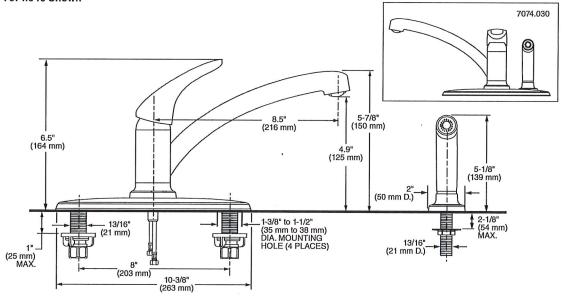


### **MODEL NUMBER:**

- ☐ 7074.000 Kitchen Faucet
  Less Side-spray, With Deck-plate.
- ☐ 7074.010 Kitchen Faucet Less Side-spray, Less Deck-plate.
- ☐ 7074.020 Kitchen Faucet
  With Side-spray, Less Deck-plate.



☐ 7074.040 Kitchen Faucet With Side-spray, With Deck-plate.



### **GENERAL DESCRIPTION:**

Brass 8-1/2" (216 mm) long swivel spout (360° rotation). Metal lever handle. Washerless 35 mm ceramic disc valve cartridge. Integrated 24" color coded stainless steel supply lines with 3/8" compression connections. 1.5gpm/5.7 L/min. maximum flow rate.

### **PRODUCT FEATURES:**

**Ceramic Disc Valve Cartridge:** Assures a lifetime of drip-free performance.

Lead Free: Faucet contains ≤ 0.25% total lead content by weighted average.

Memory Position Valving: Allows user to turn valve on and off at predetermined temperature setting without readjusting handle position each time.

Large "Comfort Zone": Allows easy fine tuning of temperature. Flexible Installation: Faucet installs in one hole and offers multiple configurations to fit your sink / counter hole needs.

### SUGGESTED SPECIFICATION

Single control kitchen faucet shall feature brass swivel spout. Shall also feature washerless 40mm ceramic disc valve cartridge and integrated 24" color coded stainless steel supply lines with 3/8" compression conncetions. Fitting shall be American Standard Model # 7074.0\_\_\_\_.

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11/16



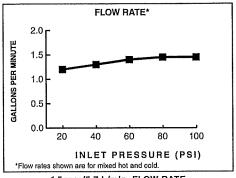


# COLONY® PRO SINGLE CONTROL KITCHEN FAUCET

### **CODES AND STANDARDS**

These products meet or exceed the following codes and standards:

ANSI A117.1 ASME A112.18.1 CSA B125.1 NSF 61/Section 9 NSF 372



1.5gpm/5.7 L/min. FLOW RATE

		Finish	Options
		Polished Chrome	Stainless Steel (PVD)
Product Number	Description	002	075
7074.000	Kitchen Faucet. Less Side-spray, With Deck-plate.		
7074.010	Kitchen Faucet. Less Side-spray, Less Deck-plate.		$\times$
7074.020	Kitchen Faucet. With Side-spray, Less Deck-plate.		$\times$
7074.030	Kitchen Faucet. Spray thru deck-plate, With Deck-plate.		
7074.040	Kitchen Faucet. With Side-spray, With Deck-plate.		

Meets the American Disabilities Act Guidelines and ANSI A117.1 Requirements for the physically challenged.

PART OF LIXIL

11/16







**P4** 

VENDOR	DESCRIPTION	PAGE
Elkay	Elkay Cooler Wall Mount Bi-level Reverse Ada Vandal-resistant, Non-filtered Refrigerated Stainless	36



# Elkay Cooler Wall Mount Bi-Level Reverse ADA Vandal-Resistant Non-Filtered Refrigerated Stainless

### Model VRCTLRSC8SC

### PRODUCT SPECIFICATIONS

Elkay Cooler Wall Mount Bi-Level Reverse ADA Vandal-Resistant, Non-Filtered Refrigerated Stainless. Chilling Capacity of 8.0 GPH (gallons per hour) of 50° F drinking water, based on 80° F inlet water and 90° F ambient, per ASHRAE 18 testing. Features shall include Louver Screens, Vandal Resistant. Furnished with Vandal Resistant bubbler. Mechanical Front Bubbler Button activation. Product shall be Wall Mount (On Wall), for Indoor + Outdoor applications, serving 2 station(s). Unit shall be certified to UL 399 and CAN/CSA C22.2 No. 120. Unit shall be lead-free design which is certified to NSF/ANSI 61 & 372 (lead free) and meets Federal and State low-lead requirements.

Special Features:	Louver Screens, Vandal Resistant
Finish:	Stainless Steel
Power:	115V/60Hz
Bubbler Style:	Vandal Resistant
Activation by:	Mechanical Front Bubbler Button
Mounting Type:	Wall Mount (On Wall)
Chilling Capacity*:	8.0 GPH
Full Load Amps	5
Dimensions (L x W x H):	36-5/16" x 18-5/8" x 27-1/8"
Approx. Shipping Weight:	94 lbs.
Installation Location:	Indoor + Outdoor
No. of Stations Served:	2
*Based on 80° F inlet water & 90	0° F ambient air temp for 50° F chilled

- Mechanically-Activated bubbler continues to supply water in event of service disruptions.
- Screens provided behind louvers to further protect internal components.

#### **COOLING SYSTEM**

drinking water.

- Compressor: Hermetically-sealed, reciprocating type, single phase. Sealed-in lifetime lubrication.
- Condenser: Fan cooled, copper tube with aluminum fins. Fan motor is permanently lubricated.
- Cooling Unit: Combination tube-tank type. Continuous copper tubing with is fully insulated with EPS foam that meets UL requirements for self-extinguishing material.
- Refrigerant Control: Refrigerant R-134a is controlled by accurately calibrated capillary tube.
- Temperature Control: Easily accessible enclosed adjustable thermostat is factory preset. Requires no adjustment other than for altitude requirements.

PROJECT:\_\_\_\_\_CONTACT:\_\_\_\_



AMERICAN PRIDE. A LIFETIME TRADITION. Like your family, the Elkay family has values and traditions that endure. For almost a century, Elkay has been a family-owned and operated company, providing thousands of jobs that support our families and communities.



Included with Product: Water Cooler

Ships in one box.

#### PRODUCT COMPLIANCE

ADA & ICC A117.1

ASME A112.19.3/CSA B45.4

Buy American Act

CAN/CSA C22.2 No. 120

NSF/ANSI 61 & 372 (lead free)

111 300







Complies with ADA & ICC A117.1 accessibility requirements when installed according to the requirements outlined in these standards. Installation may require additional components and/or construction features to be fully compliant. Consult the local Authority Having Jurisdiction if necessary.

### Installation Instructions (PDF)

5 Year Limited Warranty on the refrigeration system of the unit. Electrical components and water system are warranted for 12 months from date of installation. Warranty pertains to drinking water applications only. Non-drinking water applications are not covered under warranty.

Warranty (PDF)

OI	PΤ	IC	N	AL	Α	С	CE	S	SC	DI	₹I	E	٤
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OI HOUVE VOCEOCOLUE
EWF172 - Elkay WaterSentry VII Filter Kit (Coolers + Fountains)
MLP200 - Accessory - In Wall Carrier (Bi-Level) for bi-level EZ, LZ,
EMABF, LMABF, VRC, LVRC models
98324C - Accessory - Cane Apron for HAC, HVR, EMABF & VRC
Models (Stainless)
98481C - Accessory - Bubbler Kit Water-Efficient Vandal-Resistant

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets. This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

Elkay REV 01282021 VRCTLRSC8SC 1333 Butterfield Road, Suite 200 Downers Grove, IL 60515 © 2021 Page 1 VRCTLRSC8SC\_spec.pdf



PART:\_

DATE:\_\_ NOTES:\_

APPROVAL:





### Elkay Cooler Wall Mount Bi-Level Reverse ADA Vandal-Resistant Non-Filtered Refrigerated Stainless

Model VRCTLRSC8SC

IMPORTANT! INSTALLER PLEASE NOTE:
This water cooler has been designed and built to provide water to the user which has not been altered by materials in the cooler waterways.

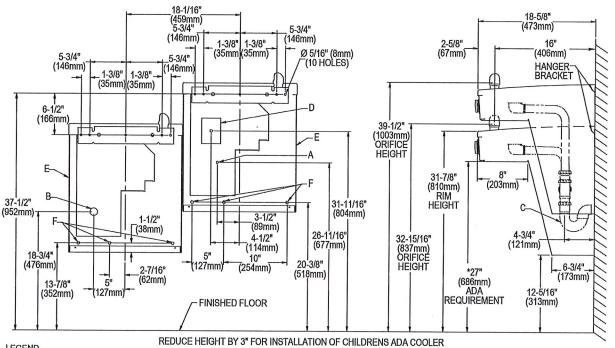
The grounding of electrical equipment such as telephone, computers, etc to water lines is a common procedure. This grounding may be in the building or occur away from the building. This grounding can cause electrical feedback into a water cooler creating an electrolysis which creates a metallic taste or causes an increase in the metal content of the water. This condition is avoidable by installing the cooler using the proper materials as shown below.

#### NOTICE

The water cooler must be connected to the water supply using a dielectric coupling. The cooler is furnished with a non-metallic strainer which meets this requirement. The drain trap which is provided by the installer should also be plastic to completely isolate the cooler from the building plumbing system.

Simultaneous operation of both bubblers on a bi-level unit may not be possible depending on water supply pressure. If simultaneous operation is desired, please ensure a minimum of 65 psi supply. Lower pressure may be possible for non-fillered and/or non-refrigerated installations.

### OPERATION OF QUICK CONNECT FITTINGS Simply push in Tube is secured Push in collet to tube to attach in position release tube in position V777 Pushing tube in before pulling it out helps to release tube 3/8" O.D. Tube connect cold water supply Building water inlet 1/4" O.D. tube water inlet to cooler Service stop (Not furnished) NOTE: Waterflow direction



### **LEGEND**

A = Recommended water supply location. Shut off valve (not furnished) to accept 3/8" O.D. unplated copper tube. 3" (76mm) maximum out from wall. B = Recommended location for waste outlet 1-1/4" O.D. drain. Drain stub 2" (51mm) out from wall. C = 1-1/4" Trap not furnished.

D = Electrical supply (3) wire recessed box.
E = Insure proper ventilation by maintaining 6" (152mm) (MIN.) clearance from cabinet louvers to wall.
F = 5/16" Bolt holes for fastening unit to wall.
NOTE: New installations must use Ground Fault Circuit Interrupter (GFCI). It is highly recommended that the circuit be dedicated and the load protection be sized for 20 amps.

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets. This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.

### **Administrator**

From:

Administrator

ent:

Monday, May 17, 2021 12:29 PM

To:

'Manish Venugopal'

Subject:

RE: Revised Electrical Gear Submittal- Marvin Village Hall

Importance:

High

Manish,

Lighting Plan:

This is rather confusing—what exactly do you need us to approve on this? I am almost 99.9% sure all of this detail was already in the plans.

In addition, there are about 9 pages of emergency wall lighting options so I am really unclear what were approving here. This is super technical material. Please advise.

Thanks,

CA

From: Manish Venugopal <Manish@Randolph-Sons.serverdata.net>

Sent: Monday, May 17, 2021 11:41 AM

To: Administrator <administrator@marvinnc.gov>; Marvin NC Manager <manager@marvinnc.gov>

**Cc:** Jeff Randolph <Jeff@randolphbuilders.com>; 'Jonathan Mychaluk' <jonathan@urbanaia.com>; John Urban <johnurban@urbanaia.com>

'ubject: RE: Revised Electrical Gear Submittal- Marvin Village Hall

Yes. We need confirmations on plumbing, electrical, & door hardware. Do you need any other submittal to be run through with the board?

Regards, Manish Venugopal, Project Manager, Contact: 704-550-1383

Email: Manish@Randolphbuilders.com



From: Administrator <administrator@marvinnc.gov>

Sent: Monday, May 17, 2021 11:39 AM

**To:** Manish Venugopal <<u>Manish@Randolph-Sons.serverdata.net</u>>; Marvin NC Manager <<u>manager@marvinnc.gov</u>> **Cc:** Jeff Randolph <<u>Jeff@randolphbuilders.com</u>>; 'Jonathan Mychaluk' <<u>jonathan@urbanaia.com</u>>; John Urban

<johnurban@urbanaia.com>

Subject: RE: Revised Electrical Gear Submittal- Marvin Village Hall

Aside from this, I am meeting with my board today to go over design elements. What else do you need from me today? Doors and plumbing?

From: Manish Venugopal < Manish@Randolph-Sons.serverdata.net >

Sent: Monday, May 17, 2021 11:38 AM

'o: Administrator <administrator@marvinnc.gov>; Marvin NC Manager <manager@marvinnc.gov>

cc: Jeff Randolph < Jeff@randolphbuilders.com >; 'Jonathan Mychaluk' < jonathan@urbanaia.com >; John Urban

<<u>johnurban@urbanaia.com</u>>

Subject: RE: Revised Electrical Gear Submittal- Marvin Village Hall

Kindly mark the fixtures you need us to change from specifications on the submittal attached in the previous email. I will get in touch with the subcontractor & supplier to get what the board requires.

Thank you. Have a great day.

Regards, Manish Venugopal, Project Manager, Contact: 704-550-1383

Email: Manish@Randolphbuilders.com



rom: Administrator <administrator@marvinnc.gov>

Sent: Monday, May 17, 2021 11:34 AM

To: Manish Venugopal <<u>Manish@Randolph-Sons.serverdata.net</u>>; Marvin NC Manager <<u>manager@marvinnc.gov</u>>
Cc: Jeff Randolph <<u>Jeff@randolphbuilders.com</u>>; 'Jonathan Mychaluk' <<u>jonathan@urbanaia.com</u>>; John Urban
<iohnurban@urbanaia.com>

Subject: RE: Revised Electrical Gear Submittal- Marvin Village Hall

The last two pages will not fly with my board per the conversations we had and the material I passed out at the precon meeting.

From: Manish Venugopal < Manish@Randolph-Sons.serverdata.net >

Sent: Monday, May 17, 2021 11:30 AM

To: Marvin NC Manager < manager@marvinnc.gov >

Cc: Jeff Randolph < Jeff@randolphbuilders.com >; 'Jonathan Mychaluk' < jonathan@urbanaia.com >; John Urban

<johnurban@urbanaia.com>; Administrator <administrator@marvinnc.gov>

Subject: FW: Revised Electrical Gear Submittal- Marvin Village Hall

Christina,

Reviewed submittal on the Electrical. Could you kindly confirm the lighting fixtures? We need this within a couple of weeks, so the electrical subcontractor can put in their order with their supplier.

Thank you. Have a great day.

Regards,



From: Jonathan Mychaluk < jonathan@urbanaia.com >

Sent: Wednesday, May 12, 2021 12:12 PM

To: Manish Venugopal <Manish@Randolph-Sons.serverdata.net>

Cc: John R. Urban < johnurban@urbanaia.com >; Jeff Randolph < Jeff@randolphbuilders.com >; Sanjay R. Patel

<srpatel@vpce.com>

Subject: FW: Revised Electrical Gear Submittal- Marvin Village Hall

Manish, the engineer requests that the electrical resubmittal be kept all together like it was originally.

Thank you.

### JONATHAN MYCHALUK Job Captain



1242 Mann Drive, Suite 200, Matthews, NC 28105 T:704.841.1899 F:704.841.8440

URBANAIA.com

From: Sanjay R. Patel

Sent: Wednesday, May 12, 2021 11:18 AM

**To:** Jonathan Mychaluk < <u>ionathan@urbanaia.com</u> > **Cc:** John R. Urban < <u>ionathan@urbanaia.com</u> >

Subject: RE: Revised Electrical Gear Submittal- Marvin Village Hall

We need it submitted together please.

Regards,

### SANJAY PATEL, PE

PROJECT MANAGÉR

2815 Collseum Centre Drive Ste 180, Charlotte, NC 28217 PO Box 31847, Charlotte, NC 28231 (Main) 704.372.7755 (Direct) 980.495.0009



From: Jonathan Mychaluk < jonathan@urbanaia.com >

Sent: Wednesday, May 12, 2021 10:42 AM

To: Sanjay R. Patel <a href="mailto:srpatel@vpce.com">srpatel@vpce.com</a>

Cc: John R. Urban < johnurban@urbanaia.com >

Subject: FW: Revised Electrical Gear Submittal- Marvin Village Hall

It looks like the GC is splitting up the electrical resubmittal into different parts.

### JONATHAN MYCHALUK Job Captain



1242 Mann Drive, Suite 200, Matthews, NC 28105 T:704.841.1899 F:704.841.8440

URBANAIA.com

From: Manish Venugopal

Sent: Wednesday, May 12, 2021 9:43 AM

To: Jonathan Mychaluk < jonathan@urbanaia.com >

Cc: John R. Urban < johnurban@urbanaia.com >; Jeff Randolph < Jeff@randolphbuilders.com >

Subject: Revised Electrical Gear Submittal- Marvin Village Hall

Jonathan,

Electrical gear revised submittal for review. Kindly let me know if there are any questions.

Thank you. Have a great day.

Regards, Manish Venugopal, Project Manager, Contact: 704-550-1383

Email: Manish@Randolphbuilders.com



From: Jonathan Mychaluk < jonathan@urbanaia.com >

Sent: Friday, April 30, 2021 5:38 PM

o: Manish Venugopal < Manish@Randolph-Sons.serverdata.net >

Cc: John R. Urban < johnurban@urbanaia.com >

Subject: 4-30-21 Marvin submittals

This has been reviewed.

### JONATHAN MYCHALUK Job Captain



1242 Mann Drive, Suite 200, Matthews, NC 28105 T:704.841.1899 F:704.841.8440

URBANAIA.com

Manish Venugopal, Project Manager, Contact: 704-550-1383

Email: Manish@Randolphbuilders.com



From: Sanjay R. Patel < srpatel@vpce.com > Sent: Monday, May 17, 2021 11:18 AM

To: Manish Venugopal < Manish@Randolph-Sons.serverdata.net >; Jonathan Mychaluk < jonathan@urbanaia.com >

Cc: John R. Urban < johnurban@urbanaia.com >; Jeff Randolph < Jeff@randolphbuilders.com >

Subject: RE: Revised Electrical Gear Submittal- Marvin Village Hall

Here you go.

Regards,

### SANJAY PATEL, PE

**PROJECT MANAGER** 

2815 Coliseum Centre Drive Ste 180, Charlotte, NC 28217 PO Box 31847, Charlotte, NC 28231 (Main) 704.372.7755 (Direct) 980.495.0009



Web / Facebook / Twitter / LinkedIn

From: Manish Venugopal < Manish@Randolph-Sons.serverdata.net >

Sent: Wednesday, May 12, 2021 1:11 PM

To: Jonathan Mychaluk < jonathan@urbanaia.com >

Cc: John R. Urban < johnurban@urbanaia.com >; Jeff Randolph < Jeff@randolphbuilders.com >; Sanjay R. Patel

<srpatel@vpce.com>

Subject: RE: Revised Electrical Gear Submittal- Marvin Village Hall

Jonathan,

Attached Electrical Revised submittal.

Thank you. Have a great day.

Regards, Manish Venugopal, Project Manager,

Contact: 704-550-1383

Email: Manish@Randolphbuilders.com



### HOP DRAWING REVIEW SHEET

Job Name: Marvin Town Hall Design Update

VPCE #: 4947.00

Description: Lighting & Panels 1st RESUBMITTAL

Co		m	_		fn.	
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<u>Comments:</u>						
	This shop drawing review only applies to the Lighting, Panel boards, Group Metering, Safety Switches, CT Cabinet and 400A Fuses cutsheets with comments listed below in RED. All other items have been previously reviewed. All previous comments still apply unless noted otherwise.					
Lighting Fixtures	Original Review - Reviewed as Noted:					
General	General - Coordinate all fixture substitution, color temperature, exact finish and system with owner and architect prior to ordering fixtures.  Architect and interior designer to approve all fixture aesthetics.					
	Type RH - No Remote Heads are required. Remote Heads are been replaced with downlights type E1 including emergency battery pack. See sheet E3 (FIRST FLOOR ELECTRICAL LIGHTING PLAN) for more details.					
	1st RESUBMITTAL - No Exceptions Taken					
Panel boards	Original Review - Resubmit as Noted:					
- Carrol Bassian	Panel 'A' - Please provide panel with 22,000 AIC in lieu of 10,000 AIC.     See Power Riser Diagram on sheet E5 (ELECTRICAL PANEL SCHEDULES, RISERS & DETAILS) for more details.					
	Panel 'MDP' - Please provide panel with MLO (Main Lugs Only) in lieu of MCB (Main Control Breaker). See sheet E5 (ELECTRICAL PANEL SCHEDULES, RISERS & DETAILS) for more details.					
	1st RESUBMITTAL - No Exceptions Taken					
Group Metering	Original Review - No Exceptions Taken					
	1st RESUBMITTAL - No Exceptions Taken					
Safety Switches	Original Review - Reviewed as Noted:					
	Make sure all safety switches are suitable for 208/120V.					
	1st RESUBMITTAL - No Exceptions Taken					



### **SHOP DRAWING REVIEW SHEET**

CT Cabinet & 400A Fuses	Original Review - Reviewed as Noted:  Make sure CT cabinet is in accordance with local utility requirement.
	1st RESUBMITTAL - No Exceptions Taken
X Reviewed Reviewed a Rejected Resubmit a	

This review was performed only for general conformance with the design concept of the project and general compliance with the information given in the Construction Documents. Any substitutions must meet or exceed the design intent and be properly coordinated with all affected trades. Modifications or comments made on this shop drawing during this review do not absolve the contractor from compliance with the requirements of the plans and specifications. Review of a specific item does not include approval of the assembly of which the item is a component. The contractor is responsible for the following: dimensions to be confirmed and coordinated on the jobsite; information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences, and procedures of construction; coordination of the work of all trades; quantities of items; and for performing all work in a safe satisfactory and timely manner.

Reviewed By: Danai Kokkoli Date: 05/17/2021





BUILDERS, INC.

Mailing:

P.O. Box 410283

G

Charlotte, NC 28241 1010 Culp Road

Shipping:

Pineville, NC 28134

Phone (704) 588-7116 Fax: (704) 588-8280

Marvin Village Hall SUBMITTAL COVER 05/12/2021

### **CONTRACTOR:**

Randolph and Son Builders Inc 1010 Culp Rd Charlotte NC 28134

### **SUBCONTRACTOR:**

Yes Real Estate Construction Group Inc., PO Box 621690, Charlotte, NC 28262

### **SUPPLIERS:**

### **MANUFACTURER:**

In the submittal

### **SUBMITTAL INFORMATION:**

Electrical Review-02 Division 16 Gear & Lighting Submittal

SHOP DRAWING REVIEW
REVIEW IS FOR GENERAL COMPLIANCE WITH
CONTRACT DOCUMENTS NO RESPONSIBILITY IS
ASSUMED FOR CORRECTNESS OF DIMENSIONS OR
DETAILS

NO EXCEPTION TAKEN		Х
MAKE CORRECTIONS NO	OTED	
AMEND & RESUBMIT		
REJECTED SEE REMARKS	S	
SEE NOTES AND OR COI	MMENTS	
RANDOLPH & SON	BUILDERS, INC.	
Date: 05/12/2021	By: MV	
Div: 16	Scope: Electrical	



**Project Name:** 

Marvin Village Hall

Project #:

2020-66

**Spec Section:** 

Submittal:

**Gear Submittal** 

Notes:

Architect:

Urban Architectural Group

1242 Mann Drive, Suite 200

Matthews, NC 28105

704-841-1899

Electrical Engineer:

**Vrettos Pappas** 

**VP Engineering** 

2815 Coliseum Centre Drive

Charlotte, NC 28217

704-372-7755

Contractor:

Randolph Builders Inc. 1010 Colville Road Charlotte, NC 28207

704-588-7116

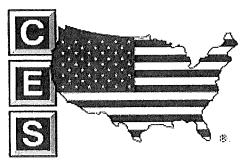
**Electrical Contractor:** 

YES Real Estate Construction Group Inc.

3724 National Drive, Suite 210

Raleigh, NC 27612 704-277-3948

YES Real Estate Construction Group Inc.'s review of this submittal is for conformance with the general design concept and for general arrangement only. Review and approval shall not be construed as to mean that any deviation from the requirements of the specifications and drawings is acceptable. The supplier of this material is responsible for meeting all requirements of the contract documents.



CITY ELECTRIC SUPPLY

# Gear Submittals for Marvin Village

**ELECTRICAL CONTRACTOR** 

### **Yes Real Estate Construction Group**

### **SUPPLIER**

City Electric Supply - Piedmont Projects
Dept.
103 Center Ln.
Huntersville, NC 28078
980-533-5400

These submittals are prepared for the purpose of insuring that the material for this project meets all specifications

DATE: 05/06/21



### **MARVIN VILLAGE**

## Submittal for Approval

**Negotiation Number** 

P02C0323X1K1

Volume 1 of 1

Equipment:

Panelboards

**Group Metering** 

Safety Switches

Date: 5/6/2021

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### **Main Table of Contents**

- 1.0 Panelboards
  - 1.1 Bill of Material
  - 1.2 Drawings
  - 1.3 Technical Documents
- 2.0 Group Metering
  - 2.1 Bill of Material
  - 2.2 Drawings
  - 2.3 Technical Documents
- 3.0 Safety Switches
  - 3.1 Bill of Material
  - 3.2 Drawings
  - 3.3 Technical Documents



**Panelboards** 



# Section Table of Contents Panelboards

### 1.0 Panelboards

Section Table of Contents

- 1.1 Bill of Material
  - 1.1.1 Separate Bills of Material by Product (Detailed)
- 1.2 Drawings
  - 1.2.1 Pow-R-Line1a A P1A225LT54AH01
  - 1.2.2 Pow-R-Line1a MDP P1A400LT42AH01
- 1.3 Technical Documents
  - 1.3.1 Panelboard General Technical Data



Bill of Material



### **Detail Bill of Material**

MARVIN VILLAGE

**Negotiation No:** Alternate No:

P02C0323X1K1 0000

Item No.

Qty

**Product** 

Panelboards

Description

54 Circuits, 225A, Fully Rated, 208Y/120V 3Ph 4W, Aluminum Bus, 22kAlC, 225A, Main Lugs Only[Top Fed], Surface Mounted

Catalog No

P1A225LT54AH01

Designation

Α

Project Name:

General Order No:

**List of Materials** Qty

225A, Main Lugs Only

20A, 1P QBHW Branch Breaker 46

20A, 1P QBHGFT Branch Breaker, GFCl - 5mA

1P QBHW Branch Provision Only

Std. Bolted Al Ground Bar (Al/Cu Cable) 1

Panel Nameplate - White with Black Letters

Type 1 Enclosure: EZB2048R

EZ Trim, Door in Door, Concealed Hardware: EZT2048S

Item No. Qty

**Product** 

Description

Panelboards

42 Circuits, 400A, Fully Rated, 208Y/120V 3Ph 4W, Aluminum Bus, 22kAIC, 400A, Main Lugs Only[Top Fed], Surface Mounted

Catalog No

P1A400LT42AH01

Designation

MDP

**List of Materials** Qty

400A, Main Lugs Only

20A, 1P QBHW Branch Breaker 8

12 1P QBHW Branch Provision Only

50A, 2P QBHW Branch Breaker

25A, 2P QBHW Branch Breaker

20A, 2P QBHW Branch Breaker

35A, 2P QBHW Branch Breaker

30A, 2P QBHW Branch Breaker

150A, EDB Sub-Feed Breaker

Std. Bolted Al Ground Bar (Al/Cu Cable)

Panel Nameplate - White with Black Letters

Type 1 Enclosure: EZB2072R

EZ Trim, Door in Door, Concealed Hardware: EZT2072S

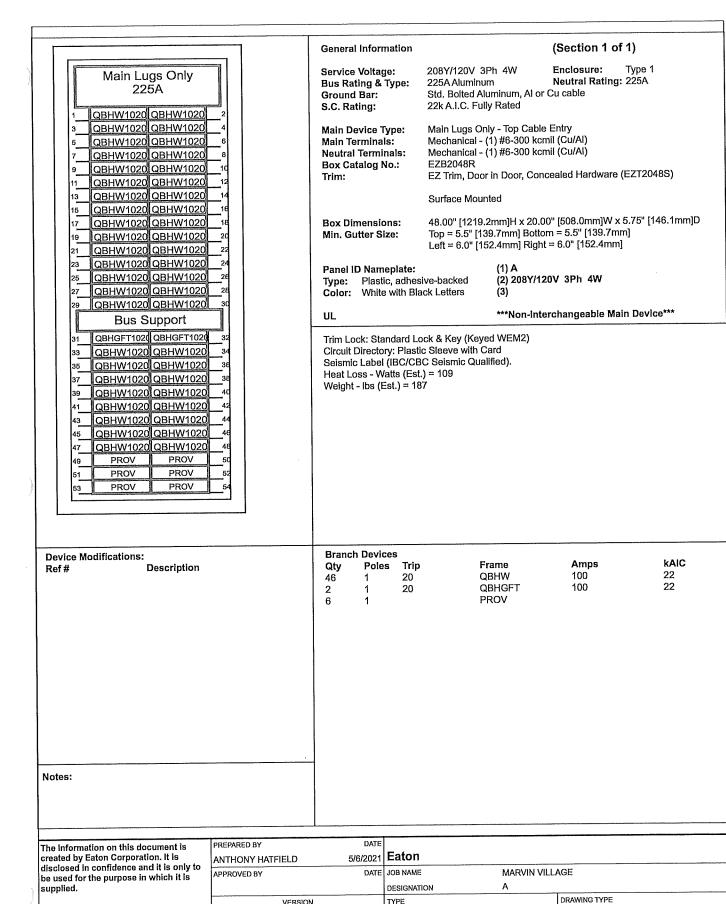
Eaton Selling Policy 25-000 applies.

All orders must be released for manufacture within 90 days of date of order entry. If approval drawings are required, drawings must be returned approved for release within 60 days of mailing. If drawings are not returned accordingly, and/or if shipment is delayed for any reason, the price of the order will increase by 1.0% per month or fraction thereof for the time the shipment is delayed.

Seller shall not be responsible for any failure to perform, or delay in performance of, its obligations resulting from the COVID-19 pandemic or any future epidemic, and Buyer shall not be entitled to any damages resulting thereof.



**Drawings** 



VERSION

1.0.0.41

REVISION

**NEG-ALT Number** 

P02C0323X1K1-0000

TYPE

G.O.

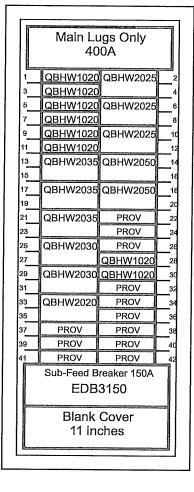
DWG SIZE

PRL1a

Customer Approval

1 of 1

ITEM



**General Information** 

(Section 1 of 1)

Service Voltage: Bus Rating & Type: Ground Bar:

208Y/120V 3Ph 4W 400A Aluminum

Enclosure: Type 1 Neutral Rating: 400A

Std. Bolted Aluminum, Al or Cu cable

S.C. Rating: 22k A.I.C. Fully Rated

Main Device Type: Main Terminals: **Neutral Terminals:** Sub-Feed Breaker:

Main Lugs Only - Top Cable Entry Mechanical - (2) #4-500 kcmil (Cu/Al) Mechanical - (2) #4-500 kcmil (Cu/Al) Mechanical - (1) #4-4/0 (Cu/Al)

**Box Catalog No.:** EZB2072R

Trim:

EZ Trim, Door in Door, Concealed Hardware (EZT2072S)

Surface Mounted

**Box Dimensions:** Min. Gutter Size:

72.00" [1828.8mm]H x 20.00" [508.0mm]W x 5.75" [146.1mm]D

Top = 5.5" [139.7mm] Bottom = 5.5" [139.7mm] Left = 6.0" [152.4mm] Right = 6.0" [152.4mm]

Panel ID Nameplate:

(1) MDP

Type: Plastic, adhesive-backed Color: White with Black Letters

(2) 208Y/120V 3Ph 4W

UL

\*\*\*Non-Interchangeable Main Device\*\*\*

1 of 1

Trim Lock: Standard Lock & Key (Keyed WEM2) Circuit Directory: Plastic Sleeve with Card Seismic Label (IBC/CBC Seismic Qualified). Heat Loss - Watts (Est.) = 252 Weight - Ibs (Est.) = 166

Device Modific	cations:	Brand	h Device	S			
Ref#	Description	Qty	Poles	Trip	Frame	Amps	kAIC
		8	1	20	QBHW	100	22
		3	2	35	QBHW	100	22
		2	2	30	QBHW	100	22
		1	2	20	QBHW	100	22
		3	2	25	QBHW	100	22
		2	2	50	QBHW	100	22
		12	1		PROV	,	
		Sub-F	eed Devi	ces			
		Qty	Poles	Trip	Frame	Amps	kAIC
		1	3	150	EDB	225	22
						<u></u>	
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The information on this document is created by Eaton Corporation. It is disclosed in confidence and it is only to be used for the purpose in which it is supplied.

Notes:

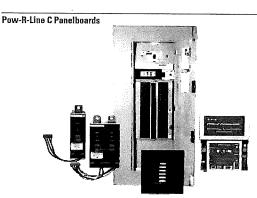
NEG-ALT Number P02C0323X1K1-0000

PREPARED BY	DATE			
ANTHONY HATFIELD	5/6/2021	Eaton		
APPROVED BY	DATE	JOB NAME	MARVIN VILLAGE	
		DESIGNATION	MDP	
VER	SION	TYPE	DRAWING TYPE	
1.0.	0.41	PRL1a	Customer Approva	1
REVISION	DWG SIZE	G.O.	ITEM	SHEET
0	A			1 of 1



### **Technical Documents**





### **Product Description**

### **Lighting and Distribution Panelboards**

Eaton's assembled panelboards are designed for sequence phase connection of branch circuit devices. This allows complete flexibility of circuit arrangement (single-, two- or three-pole) to allow balance of the electrical load on each phase.

Sturdy, rigid chassis assembly ensures accurate alignment of interior with panel front; prevents flexing and minimizes possibility of loosening or damage to current carrying parts during and after installation.

Four-point in-and-out adjustment of panel interior is provided to meet critical depth dimensions on flush installations. This compensates for possible misalignment of box at installation.

Main lugs are mechanical solderless type and approved for copper or aluminum conductors.

#### **Enclosures**

Boxes are code-gauge galvanized steel, which include a painted box finished in ANSI-61 light gray to match the trim.

Standard panelboard cabinets are designed for indoor use. Alternate types are available for indoor and special purpose applications.

All enclosures are furnished in accordance with Underwriters Laboratories standards and include wiring gutters with proper wire bending space. Special cabinets can be provided at an additional charge.

The box dimensions shown are inside dimensions. For outside dimensions, add 1/4-inch (6.4 mm).

Standard panelboard boxes are supplied without knockouts (blank endwalls).

#### Fronts

Fronts (trims) for all panelboards are made of code-gauge steel and have a high durability ANSI-61 light gray finish applied by a baked-on polyester powder coating paint system.

The fronts for lighting and appliance branch circuit panelboards and small power distribution panelboards include a door with rounded corners and concealed hinges. A flush-type latch and lock assembly is included. All locks are keyed alike. These trims are available in both surface- and flush-mounted designs.



EZ Trim Features Standard Door-in-Door with No Exposed Hardware or Sharp Edges (no Tools are Required for Installation)



The Three-Piece Trim for Larger Power Distribution Panelboards Provides for Easy Handling and Installation

Fronts for power distribution panelboards utilize a unique breaker front cover design in which each device has a dedicated bolt-on steel cover. The individual covers form a single deadfront for the panelboard that is used in conjunction with two wiring gutter covers to complete the trim. A door is not finished as part of the standard offering on these panelboards but can be provided, for an additional charge, using a deeper than standard box.

### **Application Description**

### Panelboard Selection Factors

In selecting a panelboard, the following factors must be considered:

- Service (voltage and frequency)
- Interrupting capacity (fully or series rated)
- · Ampere rating of main
- Ampere ratings of branches
- Environment

### Panelboard Short-Circuit Rating

The short-circuit rating of Eaton's assembled panelboards are test verified by, and listed with, Underwriters Laboratories (UL). Generally, these ratings are that of the lowest interrupting rated device in the panel.

Certain exceptions to this rule exist where branch devices have been UL tested in combination with specific main devices having a higher interrupting rating. Where these defined main devices and branch breaker combinations are utilized, the series short-circuit rating of the assembled panelboard will be the same as the tested rating of the approved rated main device in series with the branches. Available main and branch breaker combinations are tabulated starting on Page V2-T3-16. All combinations shown are UL tested and listed.

These series ratings apply to panels having main devices, or main lug only panelboards fed remotely by the device listed in the series ratings chart as the main, for which UL listed tests were conducted.

### **Service Entrance Equipment**

The National Electrical Code (NEC) requires that:

- A panel used as service entrance equipment must be located near the point where the supply conductors enter the building
- A panelboard having main lugs only shall have a maximum of six service disconnects to de-energize the entire panelboard from the supply conductors.
   Where more than six disconnects are required, a main service disconnect must be provided
- A disconnectable electrical bond must be provided between the neutral and ground
- A service entrance type UL label must be factory installed
- Ground fault protection of equipment shall be provided for each service disconnect rated 1000A or more if the electrical service is a solidly grounded wye system of more than 150V to ground, but not exceeding 600V phase-to-phase

**Note:** Service entrance panels must be identified as such on the order.

### **Panelboard Standards**

In 2008, both the National Electrical Code (Article 408) and UL 67 were updated to remove the mandated 42-circuit limitation. Eaton offers panelboards with more than 42 circuits for those jurisdictions that have adopted the 2008 NEC or later.

For jurisdictions that have not adopted the 2008 or later version of the National Electrical Code, the 42-circuit limitation for Lighting and Appliance Branch Panelboards remains in place. Check with your local code officials to determine specific jurisdiction status.

### Panelboard Installation

NEC requires that the operating handle of the topmost mounted device be no more than 6 feet 7 inches (2006.6 mm) above the finished floor and should be installed per NEC and manufacturer's instructions.

Additional boxes and fronts are required when the components required for one panelboard exceed the standard box dimensions.

#### **Multi-Section Panelboards**

When two or more separate enclosures are required, separate fronts for each box are standard. A common front can be furnished at additional charge.

### Interconnecting Multi-Section Panelboards

When a panelboard, for connection to one feeder, must be furnished in more than one section (Box), each section must be furnished with main bus and terminals of the same rating, unless a main overcurrent device is provided in each section.

Sub-feed or through-feed provisions must also be included (and priced) to provide connection capability to the second section.

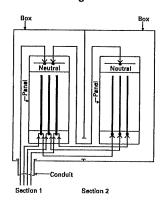
Note: Sub-feed or through-feed lugs cannot be used on any panelboard that is not protected by a single main overcurrent device either in the panelboard or immediately upstream, i.e., service entrance panelboards with main lugs only using the six disconnect rule.

### **Sub-Feed Lugs**

Sub-feed lugs (see figure below) are one means of interconnecting multi-section panels. The sub-feed (second set of) lugs are mounted directly beside the main lugs. These are required in each section except the last panel in the lineup. The feeder cables are brought into the wiring gutter of the first section and connected to the main lugs. Another set of the same size cables are connected to the sub-feed lugs (Section 1) and are carried over to the main lugs of the adjacent panel. Cross connection cables are not furnished by Eaton. Sub-feed lugs are only available on main lug only panels.

**Note:** Sub-feed lugs may not be used on main lug only (six disconnect rule) service entrance panels.

### **Sub-Feed Lugs**

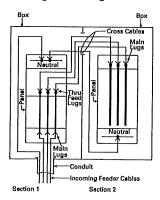


### **Through-Feed Lugs**

Through-feed lugs (see figure below) are another method to interconnect multi-section panelboards. The incoming feeder cables are connected to the main lugs or main breaker at the bottom of panel (Section 1). Another set of lugs (through-feed) are located at the opposite end of the main bus. The interconnecting cables are connected to the throughfeed lugs in Section 1 and are carried over to the main lugs in Section 2. The connection arrangement could be reversed, i.e., main lugs at top; through-feed lugs at bottom end of panel. Cross cables are not furnished by Eaton.

**Note:** Through-feed lugs may not be used on main lug only (six disconnect rule) service entrance panels.

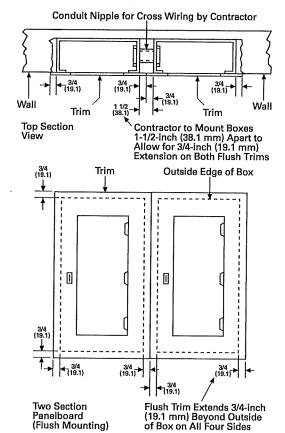
### Through-Feed Lugs



### Multiple Section Panelboard—Flush Mounted

Shown below is the standard method for flush mounting multiple section lighting and distribution panelboards using standard flush trims.

#### Multiple Section Panelboard Flush Mounted – Dimensions in Inches (mm)



### **Overcurrent Protection**

The following requirements will be found in the NEC:

Each lighting and appliance branch circuit panelboard shall be individually protected on the supply side by not more than two main circuit breakers or two sets of fuses having a combined rating not greater than that on the panelboard.



### Branch Circuit Loading for Lighting Panels

The size of mains and branches should be selected based on the following:

- Motor circuits: NEC Article 430
- · Diversity factor
- · Provision for future loading

Exception Number 1: Individual protection for a lighting panelboard is not required when the panelboard feeder has overcurrent protection not

greater than that of the panelboard.

**Exception Number 2:** 

For existing installations, individual protection for lighting panelboards is not required where such panelboards are used as service equipment in supplying an individual residential occupancy and where any bus supplying 15 or 20A circuits is protected on the supply side by an overcurrent device.

### **Ambient Temperatures**

The primary function of an overcurrent device is to protect the conductor and its insulation against overheating. In selecting the size of the devices and conductors, consideration should be given to the ambient temperature surrounding the conductors within and external to the panelboard. Cumulative heating within the panelboard may cause premature operation of the overcurrent protective devices.

Underwriters Laboratories test procedures are based, in part, on 80% loading of panelboard branch circuit devices. The NEC limits the loading of overcurrent devices in panelboards to 80% of rating where in normal operation the load will continue for three hours or more. Further derating may be required, depending on such factors as ambient temperature, duty cycle, frequency or altitude.

Exception: There is one exception to this rule in both UL and NEC. It applies to assemblies and overcurrent devices that have been listed for continuous duty at 100% of its rating.

### **Special Conditions**

Standard panelboards, assembled with standard components, are adequate for most applications. However, special consideration should be given to those required for application under special conditions such as:

- Excessive vibration or shock
- Frequencies above 60 cycles
- Altitudes above 6600 feet (2011.7m)
- Damp environment (possible fungus growth)
- Compliance with federal, state and municipal electrical codes and standards

### **Seismic Considerations**

The Uniform Building Code® and the International Building Code, as well as local and state building codes, place an emphasis on seismic building design requirements. Electrical distribution systems are treated as attachments to the building and therefore, fall into this category.

All Eaton panelboards are seismic qualified at the highest possible level, and have been tested in accordance with ANSI C37.81. This standard quantifies actual earthquake conditions, as well as equipment seismic capability.

### **Harmonic Currents**

Standard panelboard neutrals are rated for 100% of the panelboard current. However, since harmonic currents can cause overheated neutrals, an option is provided for neutrals to be rated at 200% (1200A maximum neutral for 600A main bus) of the panelboard phase current.

Panelboards with the 200% rated neutral are UL listed as suitable for use with non-linear loads.

Prior to specifying the 200% rated neutral, Eaton recommends a harmonic survey be conducted of the distribution system, be it new or existing.

### **Surge Protective Devices**

The quality of power feeding sensitive electronic loads is critical to the reliable operation of any facility. In modern offices, hospitals, and manufacturing facilities, the most frequent causes of microprocessor-based equipment downtime and damage are voltage transients and electrical noise.

Electrical loads and microprocessor-based equipment are highly susceptible to both high and low energy transients. High energy transients include lightning induced surges and power company switching. These high energy transients can destroy components instantly.

More frequently the electrical system experiences low energy transients and high frequency noise.

The effects of continual low energy transients and high frequency noise can cause erratic equipment performance or sudden failure of electronic circuit board components.

Eaton can provide protective and diagnostic systems integral to panelboards. The surge protective device (SPD) is integrated into the panelboards using a "zero lead length" direct bus bar connection.



Pow-R-Line 4

The SPD protects sensitive electronic equipment from the damaging effects of high and low energy transients, as well as high frequency noise.

### Standards and Certifications

Eaton's panelboards are designed to meet the following applicable industry standards, except where noted:

- · Underwriters Laboratories:
  - Panelboards: UL 67
  - Cabinets and Boxes: UL 50

**Note:** Only panelboards containing UL listed devices can be UL labeled.

- · National Electrical Code
- NEMA Standards: PB 1
- Federal Specification W-P-115c:
  - Circuit Breakers—
     Type I Class I
  - Fusible Switch—
     Type II Class I



### **Technical Data and Specifications**

### **Panelboard Selection Guide**

	Device Type	Maximum Voltage Rating		Maximum Main Rating (Amperes)			AC Interrupting Capacity rms Symmetrical Amperes (kA)		
Panelboard Type		AC	DC	MLO	Main Device	Branch Circuits Ampere Range	Sub-Feed Breaker Maximum Amperes	Fully Rated	Series Rated
PRL1a	Breaker	240		600	600	15–100	600	10–22	22-100
PRL1R	Breaker	240		225	225	15-100		10–22	22–100
PRL1aF	Fusible	240	_	400	400	15–30	400	200	-
PRL1a-LX	Breaker	240		225	225	15-100		10–22	22-100
PRL2a	Breaker	240	250	600	600	15–100	600	65	65–200
	Breaker	480Y/277	250	600	600	15–100	600	14	22–150
PRL2R	Breaker	240	_	225	225	15–100	P	1022	22200
	Breaker	480Y/277	_	225	225	15–100	-	14	22100
PRL2aF	Fusible	480Y/277	-	400	400	15–30	400	200	
PRL2a-LX	Breaker	240	250	225	225	15–100	_	65	65–200
	Breaker	480Y/277	250	225	225	15100	-	14	22–150
PRL3a	Breaker	240	250	800	600	15225	600	10-200	22-200
	Breaker	480	250	800	600	15–225	600	14-100	22150
	Breaker	600	250	800	600	15–225	600	14-35	-
PRL3E	Breaker	240	250	600	600	15-125	400 .	25-100	100-200
	Breaker	480Y/277	250	600	600	15–125	400	18–65	65-100
	Breaker	480	250	600	600	15–125	400	18-65	65100
PRL4B	Breaker	240	600	1200	1200	15-1200	erana.	10-200	22200
	Breaker	480	600	1200	1200	15-1200		14-200	22-150
	Breaker	600	600	1200	1200	15–1200		14-200	-
PRL4D	Breaker	240	_	1200	1200 ®	600	White	65–200 ·	
	Breaker	480	_	1200	1200 ①	600	···	35–100	-
	Breaker	600	_	1200	1200 ◎	600		18–50	_
PRL4F	Fusible	240	250	1200	1200	30–1200		100-200	<del>-</del>
	Fusible	600	250	1200	1200	30–1200		100-200	
PRL5P	Breaker	240	250	1200	1200	15–1200	grands.	10-200	22–200
	Breaker	480	250	1200	1200	15-1200	_	14–200	22–150
	Breaker	600	250	1200	1200	15-1200	_	14-200	
ow-R-Command™	Breaker	240		400	400	15-225	<del></del>	10-65	22–100
	Breaker	480Y/277	******	400	400	15-225		14	65–100
levator Control	Fusible	240		800	800	15-200	-	200	_
	Fusible	480Y/277		800	800	15–200	-	200	_
	Fusible	480	_	800	800	15-200		200	

#### Note

① Fixed mounted only,

### Panelboards and Lighting Control

### Pow-R-Line C Panelboards

### Terminal Wire Ranges, Pressure-Type Al/Cu Terminals Except as Noted

Note: All terminal sizes are based on wire ampacities corresponding to those shown in NEC Table 310.16 under the 75°C insulation columns (75°C wire). The use of smaller size, (in circular mills), regardless of insulation temperature rating, is not permitted.

Where copper-aluminum terminals are supplied on designated panelboard types, best results are obtained if a suitable joint compound is applied when aluminum conductors are used.

Check Eaton's standard terminal sizes versus customer requirements. In particular, 400 and 800A breakers often require nonstandard lugs. Optional 750 kcmil mechanical screw-type terminals are available upon request. Panelboard dimensions may be affected, refer to Eaton.

### Standard Main Lug Terminals

PRIJE #12-1/0 - #6-350 kcmil (2) #4-500 kcmil -	1200 A
PRL2a #12-1/0 #6-300 kcmil — (2) #4-500 kcmil (2) 4/0-500 kcmil —  PRL1R #12-1/0 #6-300 kcmil — (2) #4-500 kcmil — —  PRL2R #12-1/0 #6-300 kcmil — (2) #4-500 kcmil — —  PRL1aF #12-1/0 #6-300 kcmil — (2) #4-500 kcmil — —  PRL2aF #12-1/0 #6-300 kcmil — (2) #4-500 kcmil — —  PRL2aF #12-1/0 #6-300 kcmil — (2) #4-500 kcmil — —  PRL3a #12-1/0 — #6-350 kcmil (2) #4-500 kcmil (2) #4-500 kcmil (3) #4-500 kcmil — —  PRL3E #12-1/0 — #6-350 kcmil (2) #4-500 kcmil (2) #4-50	
PRL1R #12-1/0 #6-300 kcmil — (2) #4-500 kcmil — — — — — — — — — — — — — — — — — — —	_
PRL2R #12-1/0 #6-300 kcmil — (2) #4-500 kcmil — — — — — — — — — — — — — — — — — — —	
PRL1aF #12-1/0 #6-300 kcmil — (2) #4-500 kcmil — — — — — — — — — — — — — — — — — — —	
PRL2aF #12-1/0 #6-300 kcmil — (2) #4-500 kcmil — ——————————————————————————————————	-
PRI.3a #12-1/0 — #6-350 kcmil (2) #4-500 kcmil (2) #4-500 kcmil (3) #4-50 PRI.3E #12-1/0 — #6-350 kcmil (2) #4-500 kcmil (3) #4-500 kcmil (2) #4-500 kcmil (2) #4-500 kcmil (3) #4-500 kcmil (2)	_
PRISE #12-1/0 — #6-350 kcmil (2) #4-500 kcmil (2) #4-500 kcmil — (2) #4-500 kcmil (2) #4-50	
THE RELEASE TO THE PROPERTY OF	500 kcmil —
PRL4 — #4-500 kcmil (2) #4-500 kcmil (2) #4-500 kcmil (3) #4-5	#*****
	500 kcmil (4) #4-500 kcmil
PRL1a-LX #12-1/0 #6-300 kcmil	_
PRL2a-LX #12-1/0 #6-300 kcmil — — · — — —	*****
PRCE #12-1/0 #6-300 kcmil (2) #4-500 kcmil	
PRC100 #12-1/0 #6-350 kcmil (2) #4-500 kcmil	
PRC25 #12-1/0 #6-300 kcmil (2) #4-500 kcmil	
or or	500 kcmil (4) #4750 kcmil 400 kcmil
Elevator Control — #4–500 kcmil (2) #4/0–500 kcmil (2) #4/0–500 kcmil (3) #4/0	0–500 kcmil —

### **Standard Circuit Breaker Terminals**

Breaker Type	Ampere Rating	Wire Range
BAB, QBHW, BABRSP,	15–70	#14-#4
HQP, QPHW	90–100	#81/0
EDB, EDS, ED, EDH, EDC	100-225	#4-4/0 or #6-300 kcmil
EGB, EGE, EGS, EGH	15-50	#14-3/0 AL/CU
	60–125	#6-3/0 AL/CU
EHD, FDB, FD,	15-100	#141/0
HFD, FDC, HFDDC ◎	125–225	#4-4/0
FCL	15–100	#14-1/0
GНВ, НСНВ, СНО,	15–30	#14-#10
GHQRSP	25–100	#10-1/0
EGB, EGS, EGH	15-50	#14-1/0
	60-125	#6-2/0
JD, HJD, JDC, HJDDC @	70–250	#4-350 kcmil
DK	250-350	250-500 kcmil
	400	(2) 3/0–250 kcmil or (1) 3/0–500 kcmil
KD,	225	(1) #3-350 kcmil
HKD, KDC, HKODC,	350	(2) 3/0–250 kcmil or
•	400	(2) 3/0–250 kcmil or (1) 3/0–500 kcmil
LHH	150-400	#2-500 kcmil
	150-400	(2) #2500 kcmil
	150-400	(1) 500–750 kcmil
LGE, LGH, LGC,	250-400	(1) #2500 kcmil
.GU, LHH ⊙	500-600	(2) #2-500 kcmil
.D, HLD, LDC, HLDDC ®	300-500	(2) 250–350 kcmil
CLD, CHLD	600	(2) 400–500 kcmil
MDL, HMDL, HMDLDC @	400-600	(2) #1500 kcmil
CMDL, CHMDL	700-800	(3) 3/0-400 kcmil
ND, HND, CND, CHND, NDC,	8001000	(3) 3/0-400 kcmil
CNDC	1200	(4) 4/0–500 kcmil
CL	125–225	(1) #6-350 kcmil
	250400	(1) #4-250 kcmil and (1) 3/0-600 kcmil
В-Р	15100	#14-1/0
A-P	70-225	#6-350 kcmil
	250400	(1) #4-250 kcmil and (1) 3/0-600 kcmil
√B-P, NBDC @	300-700	(2) #1-500 kcmil
	800	(3) 3/0-400 kcmil
IGS, NGH, NGC IGS-C, NGH-C, NGC-C	400–1200	(4) 4/0-500 kcmil (Cu/Al)

### **FDPW Switch Terminals**

Ampere Rating	Wire Range
30	#14-1/0
60	#14-1/0
100	#141/0
200	#4–300 kcmil
400	250-750 kcmil or (2) 3/0-250 kcmil
600	(2) #4-600 kcmil or (4) 3/0-250 kcmil
800	(3) 250–750 kcmil or (6) 3/0–250 kcmil
1200	(4) 250–750 kcmil or (8) 3/0–250 kcmil

### **Elevator Control Panel Feeder Terminals**

Wire Range	
#14-1/0	in many disposery
#14-1/0	
#141/0	
#4-300 kcmil	
	#14-1/0 #14-1/0 #14-1/0

#### Notae

- ① LHH is 400A maximum.
- Suitable for DC applications only.





**Group Metering** 



# Section Table of Contents Group Metering

- 2.0 Group Metering
  - Section Table of Contents
  - 2.1 Bill of Material
    - 2.1.1 Separate Bills of Material by Product (Detailed)
  - 2.2 Drawings
    - 2.2.1 Anti-Inversion Clip Installed, DUKE ENERGY Approve - 1009181CH
  - 2.3 Technical Documents
    - 2.3.1 Single Meter Socket Accessories Tech Data



# **Bill of Material**



# **Detail Bill of Material**

Project Name: MARVIN VILLAGE
General Order No:

Negotiation No: Alternate No: P02C0323X1K1

0000

Item No. Qty

Product

Description

**GROUP METERING** 

Anti-Inversion Clip Installed, DUKE ENERGY Approve

Catalog No

1009181CH

Qty List of Materials

1 Anti-Inversion Clip Installed, DUKE ENERGY Approve

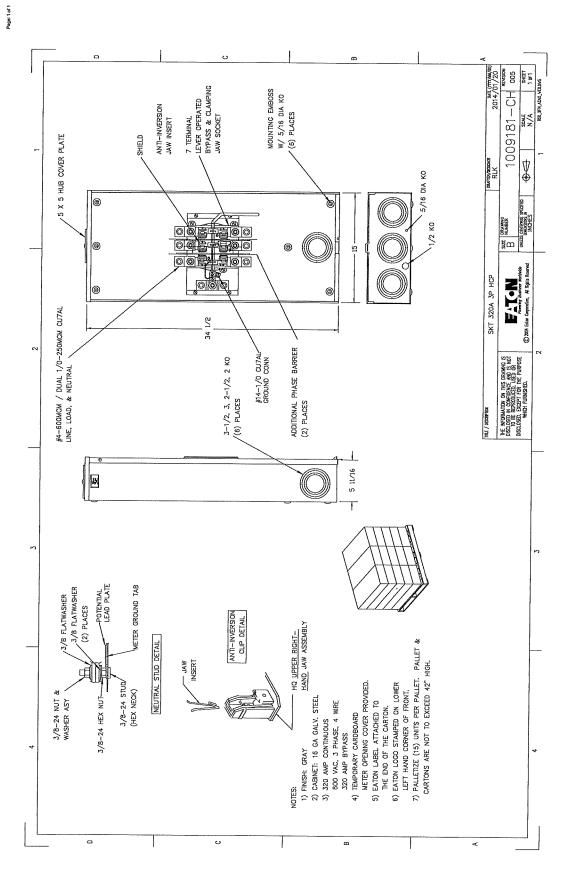
Eaton Selling Policy 25-000 applies.

All orders must be released for manufacture within 90 days of date of order entry. If approval drawings are required, drawings must be returned approved for release within 60 days of mailing. If drawings are not returned accordingly, and/or if shipment is delayed for any reason, the price of the order will increase by 1.0% per month or fraction thereof for the time the shipment is delayed.

Seller shall not be responsible for any failure to perform, or delay in performance of, its obligations resulting from the COVID-19 pandemic or any future epidemic, and Buyer shall not be entitled to any damages resulting thereof.



# **Drawings**



GO/NEG-Alt-Date: P02C0323X1K1-0000-5/6/2021		Job Name: MARVIN VILLAGE	
Item Number:	Catalog Number:	Designation:	
	1009181CH		



# **Technical Documents**

# **Product Selection**

### **Meter Socket Accessories**

Motor Godice Addessories	
Description	Part Number
Hub Closure Plates	
Hub closure plate meter socket accessories	ARP00002CHB
Clam shell hub closure plate meter socket accessories	ARP00002CHBCS
1-inch hub closure plate meter socket accessories	ARP00003CH1
Clam shell 1-inch hub closure plate—small opening	ARP00003CH1CS
1-1/4-inch hub closure plate meter socket accessories	ARP00004CH12
Clam shell 1-1/4-inch hub closure plate—small opening	ARP00004CH12CS
1-1/2-inch hub closure plate meter socket accessories	ARP00005CH15
Clam shell 1-1/2-inch hub closure plate—small opening	ARP00005CH15CS
2-inch hub closure plate meter socket accessories	ARP00006CH2
Aluminum hub closure plate for single sockets	ARP00008CH
Large hub cover plate	ARP00016CHB
Hubs	
2-inch hub with large diameter opening	ARP00017CH2
2-1/2-inch hub for meter socket accessories	ARP00007CH25
Clam shell 2-1/2-inch hub for meter socket accessories	ARP00007CH25CS
2.5-inch hub with large diameter opening	ARP00018CH25
3-inch hub	ARP00019CH3
3-1/2-inch hub for meter sockets	ARP00020CH35
4-inch hub	ARP00021CH4
Hub adapter from large opening to small opening	ARPO0015CHAP
Lug Kits	
(2) #6–250 kcmil, double barrel lug for 4, 5 and 7 terminal 3/8-inch stud sockets	ARPOG118CH
#4-600 or (2) 1/0-250 kcmil, single barrel lug for 4, 5 and 7 terminal 3/8-inch stud sockets	ARP00429CH
#6-350 kcmil, single barrel lug for 4, 5 and 7 terminal 3/8-inch stud sockets	ARPO0119CH
#4-600 kcmil, single barrel lug for 4, 5 and 7 terminal 3/8-inch stud sockets	ARP00129CH
(2) #6–350 kcmil, double barrel lug for 4 terminal 3/8-inch stud sockets	ARP00427CH
Miscellaneous	
Screw sealing ring for single meter sockets	ARP00027CH
Fifth jaw kit	ARP00035CHJ
Fifth jaw for bolt on meter	ARP00326CH
Neutral insulating kit for lever bypass sockets only	ARP00759CH
100 A meter socket horn cap assembly kit	ARP00777CH
Fifth jaw kit for 320 A offset socket	ARP00862CH
HQ anti-inversion clip for single meter sockets	ARP00984CH
Fifth jaw for Chicago and Wisconsin pedestal	ARP01085CH
350 kcmil BNS cap assembly kit for meter sockets	ARP01226CH
Right hand block assembly with Z Bar	ARP01258CH
Left hand block assembly with Z Bar	ARP01414CH
Meter pack trough closure plate kit	ARP01565CH
2/0 connector kit for MBB and MBP socket breaker	ARP01612CH
	· · · · · · · · · · · · · · · · · · ·

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# **Cross-Reference**

### **Meter Sockets**

	Manufacturer	
	Eaton	Milbank
Description	Part Number	Part Number
125 A, OH/UG, ringless, triplex ground, hub opening	UTRS101BE	U7487-RL-TG
125 A, OH/UG, ringless, triplex ground, hub cover plate	UTRS101CE	U7487-XL-TG
125 A, OH/UG, ringless, triplex ground, hub opening, horn bypass	UHTRS101BE	U7487-RL-TG-KK
125 A, OH/UG, ringless, triplex ground, hub cover plate, horn bypass	UHTRS101CE	U7487-XL-TG-KK
125 A, OH/UG, ringless, triplex ground, hub opening, fifth terminal	UTRS101BCH + MSR5TK	U7487-RL-TG-5T
125 A, OH/UG, ringless, triplex ground, hub cover plate, fifth terminal	UTRS101CE + MSR5TK	U7487-XL-TG-5T
125 A, OH/UG, ringless, triplex ground, hub opening, horn bypass, fifth terminal	UHTRS101BCH + MSR5TK	U7487-RL-TG-KK-5T
125 A, OH/UG, ringless, triplex ground, hub cover plate, horn bypass, fifth terminal	UGHTRS101CE + MSR5TK	U7487-XL-TG-KK-5T
200 A, OH, ringless, triplex ground, hub opening	UTRS202BCH	U7021-RL-TG
200 A, OH, ringless, triplex ground, hub cover plate	UTRS202CCH	U7021-XL-TG
200 A, OH, ringless, triplex ground, hub opening, horn bypass	UHTRS202BCH	U7021-RL-TG-KK
200 A, OH, ringless, triplex ground, hub cover plate, horn bypass	UHTRS202CCH	U7021-RL-TG-KK
200 A, OH, ringless, triplex ground, hub opening, fifth terminal	UGTRS202BCH	U7021-RL-TG-5T
200 A, OH, ringless, triplex ground, hub cover plate, fifth terminal	UGTRS202CCH	U7021-XL-TG-5T
200 A, OH, ringless, triplex ground, hub opening, horn bypass, fifth terminal	UGHTRS202BCH	U7021-RL-TG-KK-5T
200 A, OH, ringless, triplex ground, hub cover plate, horn bypass, fifth terminal	UGHTAS202CCH	U7021-RL-TG-KK-5T
200 A, OH/UG, ringless, triplex ground, hub opening, 250 kcmil lugs	UTRS212BCH	No cross (no 250 kemil lugs)
200 A, OH/UG, ringless, triplex ground, hub cover plate, 250 kcmil lugs	UTRS212CCH .	No cross (no 250 kcmil lugs)
200 A, OH/UG, ringless, triplex ground, hub opening, horn bypass, 250 kcmil lugs	UHTRS212BCH	No cross (no 250 kcmil lugs)
200 A, OH/UG, ringless, triplex ground, hub cover plate, horn bypass, 250 kcmil lugs	UHTRS212CCH	No cross (no 250 kemil lugs)
200 A, OH/UG, ringless, triplex ground, hub opening, fifth terminal, 250 kcmil lugs	UGTRS212BCH	No cross (no 250 kemil lugs)
200 A, OH/UG, ringless, triplex ground, hub cover plate, fifth terminal, 250 kcmil lugs	UGTRS212CCH	No cross (no 250 kcmil lugs)
200 A, OH/ UG, ringless, triplex ground, hub opening, horn bypass, fifth terminal, 250 kcmil lugs	UGHTRS212BCH	No cross (no 250 kcmil lugs)
200 A, OH/UG, ringless, triplex ground, hub cover plate, horn bypass, fifth terminal, 250 kcmil lugs	UGHTRS212CCH	No cross (no 250 kcmil lugs)
200 A, OH/UG, ringless, triplex ground, hub opening, 350 kcmil lugs	UTRS213BE	U7040-RL-TG
200 A, OH/UG, ringless, triplex ground, hub cover plate, 350 kcmil lugs	UTAS213CE	U7040-XL-TG
200 A, OH/UG, ringless, triplex ground, hub opening, hom bypass, 350 kcmil lugs	UHTRS213BE	U7040-RL-TG-KK
200 A, OH/UG, ringless, triplex ground, hub cover plate, horn bypass, 350 kcmil lugs	UHTRS213CE	U7040-XL-TG-KK
200 A, OH/UG, ringless, triplex ground, hub opening, fifth terminal, 350 kcmil lugs	UGTRS213BE	U7040-RL-TG-5T
200 A, OH/UG, ringless, triplex ground, hub cover plate, fifth terminal, 350 kcmll lugs	UGTRS213CE	U7049-XL-TG-5T
200 A, OH/ UG, ringless, triplex ground, hub opening, horn bypass, fifth terminal, 350 kcmil lugs	UGHTRS213BE	U7040-RL-TG-KK-5T
200 A, OH/UG, ringless, triplex ground, hub cover plate, horn bypass, fifth terminal, 350 kcmil lugs	UGHTRS213CE	U7040-XL-TG-KK-5T
200 A, UG, ringless, triplex ground, solid top	UTRS223ACH	U1980-0-TG
200 A, UG, ringless, triplex ground, solid top, horn bypass	UHTRS223ACH	U1980-0-TG-KK
200 A, UG, ringless, triplex ground, solid top, fifth terminal	UGTRS223ACH	U1980-O-TG-5T
200 A, UG, ringless, triplex ground, solid top, horn bypass, fifth terminal	UGHTRS223ACH	U1980-O-TG-KK-5T
· · · · · · · · · · · · · · · · · · ·		

# Accessories and Cross-Reference

### **Lever Bypass**

Milbank
Part Number
U9800-RL
U9800-XL
U9800-R
U9800-X
U4550-RL
U4550-XL
U9559-R
U9550-X
U4701-RL
U4701-XL
U4701-R
U4701-X
U9801-RL
U9801-XL
U9801-R
U9801-XL
U9801-RRL
U9801-RXL
U4551-RL
U4551-XL
U9551-R
U9551-X
U9551-RRL or U4551-RRL
U9551-RXL or U4551-RXL
U9701-RL or U4701-RL
U9701-XL or U4701-XL
U9701-R or U4701-R
U9701-RX or U4701-RX
U9701-RRL or U4701-RRL
U9701-RXL or U4701-RXL
U1079-R or U1797-R
U1079-X or U1797X
U2448-R or U2124-R
U2448-RX or U2124-RX
Hosen P
U2120-R U2120-X
_

Manufacturer

4

# Accessories and Cross-Reference

### Accessories

	Manufacturer		
	Eaton	Milbank	
Description	Part Number	Part Number	
Small hub cover plate	ARP00002CHB	A7551	
1-inch hub	ARP00003CH1	A7514	
1-1/4-inch hub	ARP00004CH12	A7515	
1-1/2-inch hub	ARP00005CH15	A7516	
2-inch hub	ARP00006CH2	A7517 .	
2-1/2-inch hub	ARP00007CH25	A7518	
3-inch hub	ARP00019CH3	A8110	
3-1/2-inch hub	ARP00020CH35	A8111	
4-inch hub	ARP00021CH4	A8112	
Large to small hub opening adapter plate	ARP00015CHAP	S8324	
Large hub cover plate	ARP00016CHB	S9064	

(4)



Safety Switches



# Section Table of Contents Safety Switches

- 3.0 Safety Switches
  - Section Table of Contents
  - 3.1 Bill of Material
    - 3.1.1 Separate Bills of Material by Product (Detailed)
  - 3.2 Drawings
    - 3.2.1 DH325NGK Safety Switches -
  - 3.3 Technical Documents
    - 3.3.1 Safety Switch Catalog Number System
    - 3.3.2 Safety Switch Heavy Duty Tech Data



# **Bill of Material**



# **Detail Bill of Material**

MARVIN VILLAGE Project Name: General Order No:

**Negotiation No:** Alternate No:

P02C0323X1K1

0000

Item No. Qty

Product

Safety Switches

Description Safety Switches

Catalog No

DH325NGK

Qty

**List of Materials** 

Neutral / Ground Kit : DS400NK (Field Installed)

Heavy Duty Switch - Fusible, 4-Wire, 240 VAC, 400 A, NEMA 1

Eaton Selling Policy 25-000 applies.

All orders must be released for manufacture within 90 days of date of order entry. If approval drawings are required, drawings must be returned approved for release within 60 days of mailing. If drawings are not returned accordingly, and/or if shipment is delayed for any reason, the price of the order will increase by 1.0% per month or fraction thereof for the time the shipment is delayed.

Seller shall not be responsible for any failure to perform, or delay in performance of, its obligations resulting from the COVID-19 pandemic or any future epidemic, and Buyer shall not be entitled to any damages resulting thereof.



# **Drawings**

# **Safety Switch General Information**

**Global Specifications** 

System Voltage 240 VAC

Switch Type Single Throw - Heavy Duty

Poles/Blades 3-Pole
Amperage 400

Protection Fusible with Neutral

Enclosure Type NEMA 1

Fuse Clips "H" Fuse Clips

Switch Lugs (2) 1/0-300 or (1) 1/0-750

Fungus Proof Treatment None
Lock-On Provision None
Fuse Pullers None
Control Pole None
Ground Lugs (2) 6-250
Stainless Mechanism None
Mill Duty None

**Nameplate** 

Field Installed Kits

QUANTITY DESCRIPTION

1 Neutral / Ground Kit : DS400NK (Field Installed)

Safety Switch Catalog No.

DH325NGK

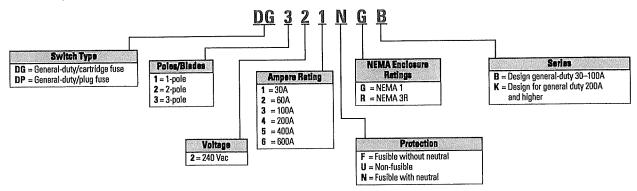
The information on this document is	PREPARED BY	DATE			
created by Eaton Corporation. It is	HUNTER KOCHER	5/6/2021	Eaton		
disclosed in confidence and it is only to be used for the purpose in which it is	APPROVED BY	DATE	JOB NAME MARVII	N VILLAGE	
supplied.			DESIGNATION		
	VER	SION	TYPE	DRAWING TYPE	
	1.0.	.0.2	Safety Switch General Information	Customer Appr.	
NEG-ALT Number	REVISION	DWG SIZE	G.O.	ITEM	SHEET
P02C0323X1K1-0000	0	Α			1 of 1



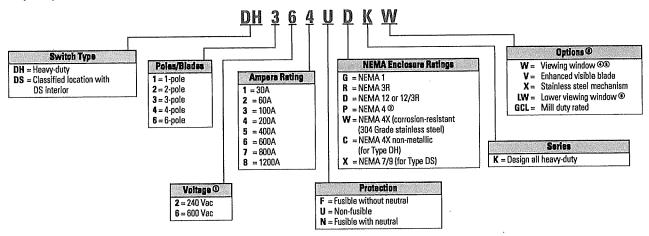
# **Technical Documents**

### **Catalog Number Selection**

#### **General-Duty**



#### **Heavy-Duty**



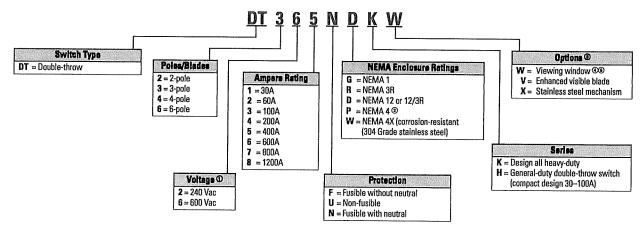
### Notes

- ① For DC ratings, check individual switch ratings.
- Only available for 400A and higher safety switches.
- See Modifications-Flex Center for additional available options.
- All window switches feature enhanced visible blade design as standard.
- Only available in NEMA 12/3R and NEMA 4X enclosures.
- Only available in 200 to 1200A NEMA 12/3R and NEMA 4X enclosures.

These tables are intended for use in breaking down existing catalog numbers. They are not intended for building new catalog numbers.

A factory-installed ground lug is supplied in all heavy-duty safety switches.

#### **Double-Throw**



#### Notes

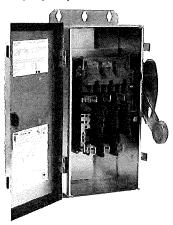
- ① For DC ratings, check individual switch ratings.
- Only available for 400A and higher safety switches.
- See Modifications-Flex Center for additional available options.
- All window switches feature enhanced visible blade design as standard.
- Only available in NEMA 12/3R and NEMA 4X enclosures.

These tables are intended for use in breaking down existing catalog numbers. They are not intended for building new catalog numbers.

A factory-installed ground lug is supplied in all heavy-duty safety switches.



#### Heavy-Duty Safety Switch



# **Heavy-Duty**

### **Product Description**

- 30-1200A
- 600 Vac, 600 Vdc maximum
- Horsepower rated
- Fusible and non-fusible switches are 100% load break and 100% load make rated
- The continuous load current of fusible switches is not to exceed 80% of the rating of fuses employed in other than motor circuits. Non-fusible switches are 100% fully rated
- Suitable for service entrance applications unless otherwise noted
- For factory modifications, refer to Page V2-T1-15

### **Application Description**

For heavy commercial and industrial applications where reliable performance and service continuity are critical.

For the toughest heavy commercial and industrial applications, refer to Page V2-T1-77 for catalog information on our mill-duty safety switch.

316 Grade stainless steel is often a desirable choice for wastewater treatment plants and petrochemical facilities.

# Features, Benefits and Functions

- Deionizing arc chutes; arc chutes confine and suppress the arcs produced by opening contacts under load
- Mechanically interlocked cover to prevent easy access when the switch is in the ON position
- Clearly visible palm fitting red handle
- Premium 316-Grade stainless steel enclosures offer better corrosion resistance in the presence of most chemicals, salts and acids, and is more resistant to marine atmospheres
- Visible double-break quickmake, quick-break blades
- Visible ON/OFF indication

- 30–1200A NEMA 12 designs convertible to NEMA 3R by opening factory-installed drain hole
- · Tri-lingual nameplates

### **Standards and Certifications**

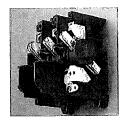
- UL listed File No. E5239
- Meets UL 98 for enclosed switches and NEMA Std. KS-1



### Seismic Qualifications

 Heavy-duty switches exceed the requirements of Uniform Building Code (UBC) and California Code Title 24 OSP-0011-10, OSP-0012-10





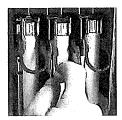
Visible Double-Break Rotary Blade Mechanism

 Two points of contact provide a positive open and close, easier operation, and also help prevent contact burning for longer contact life



Clear Line Shield

 Protects against accidental contact with energized parts. Probe holes enable the user to test if the line side is energized without removing the shield. Not typically provided on general-duty switches, but available as a field kit or factory installed



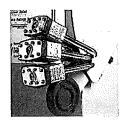
Built-In Fuse Pullers (NEMA 12 and 4X 30-200A Only)

 Provide easy removal of fuses



Clearly Visible Handle

 The position (ON or OFF) can be clearly seen from a distance and the length provides for easy operation



Triple Padlocking Capability

 Personnel safety feature because the large hasp can accommodate up to three 3/8-inch (9.5 mm) shank locks



Additional Locking Capability

 Cabinet door can be further padlocked at the top and bottom as applicable



Interlocking Mechanism

 Door cannot be opened when the handle is in the ON position. Front and side operable defeater mechanism provides for user access when necessary on singlethrow switches



Tangential Knockouts

 An ample number are provided on the top, bottom and sides of both NEMA Types 1 and 3R enclosures through 200A



**Bolt-On Hub Kits** 

 For switches in a NEMA Type 3R, 30–200A. Use a Myers type hub for all others

### **Technical Data and Specifications**

#### **Standard Lug Capacities**

Description	Minimum Wire Size	Maximum Wire Size	Wire Type
30A DP	<b>#</b> 14	<b>≇</b> 10	CU
	<b>#</b> 12	<b>#</b> 10	AL
30A DG	<b>#</b> 14	<b>#</b> 6	CU/AL.
30A DH, DT	<b>#</b> 14	#2	CU/AL.
60A DG	<b>#</b> 14	<b>#</b> 1/0	CU/AL.
60A DH, DT	<b>#</b> 14	<b>#</b> 2	CU/AL
100A DG ⊙	<b>#</b> 14	<b>#</b> 1/0	CU/AL
100A DH, DT	<b>#</b> 14	<b>#</b> 1/0	CU/AL
200A DG, DT	<b>#</b> 6	250 kcmil	CU/AL
200A DH Type 1 and 3R	<b>#</b> 6	250 kcmil	CU/AL
200A DH Type 4X and 12	<b>#</b> 6	300 kcmil	CU/AL
400A DG, DH, DT ®	(2) #1/0	(2) 300 kcmil	CU/AL or ®
	(1) #1/0	(1) 750 kcmil	CU/AL
600A DG, DH	(1) #2	(1) 600 kcmil	CU/AL and ⊙
	(1) #1/0	(1) 750 kcmil	CU/AL
600A non-fusible DT	(2) 250	(2) 500 kcmil	CU/AL
800A DH	(4) <b>#</b> 1/0	(4) 750 kcmil	CU/AL
600A fusible DT, 800A DT	(3) #250	(3) 500 kcmil	CU/AL
1200A DH, DT	(4) #1/0	(4) 750 kcmil	CU/AL
Copper-Bodied Lugs ®			
30A CU	<b>#</b> 14	<b>#</b> 6	CU
60A CU	<b>≢</b> 14	<b>#</b> 4	CU
100A CU	<b>#</b> 6	<b>#</b> 1/0	CU
200A CU	<b>#</b> 6	250 kcmil	CU
400A CU Type 4, 4X, and 12	<b>#</b> 1/0	500 kcmil	CU
600-800A CU Type 4, 4X and 12	(2) #1/0	(2) 500 kcmil	CU
Mate	***************************************		

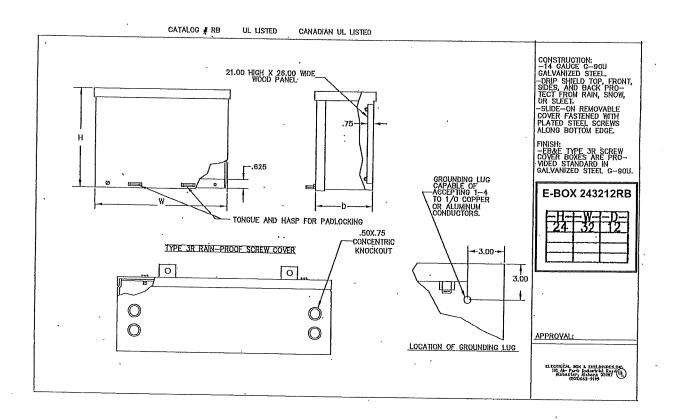
- O The maximum size aluminum or copper-clad wire allowable for applications where the conductor enters or leaves the enclosure through the wall opposite its terminal is \$1 gauge.
- Applicable to DG/DH non-fused NEMA 1 and 3R only. The maximum size wire allowable for applications where the conductor enters or leaves the enclosure through the wall opposite its terminal is 250 kcmil.
- Single barrel lug that accepts one or two cables per phase as detailed above.
- Double barrel lug that accepts 2 cables per phase as detailed above.
- No Copper-Bodied Lugs are available for 1200A switches. No Copper-Bodied Lugs are available for larger than 500 kcmil cables.
   No Copper-Bodied Lugs are available for 400–800A NEMA 1 or NEMA 3R switches.

Although certain lug capacities are larger than required, only minimum wire bending space is provided per the requirements noted in NEC®. A factory-installed ground lug is supplied in all heavy-duty safety switches.



# CT Cabinet & 400A Fuses

PROJECT: MARVIN VILLAGE MATERIAL: CT CABINET LOCATION: MARVIN,NC

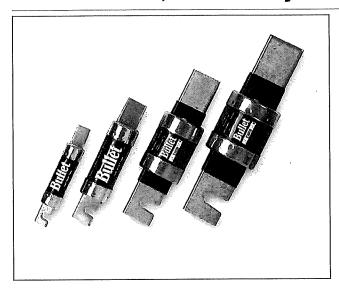




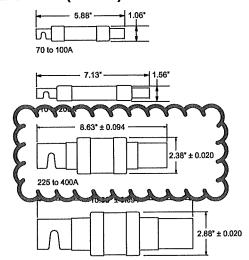
# **ECNR**

# Class RK5 250Vac, 70 to 600A Dual-Element, Time-Delay Fuses

PROJECT: MARVIN VILLAGE
PRODUCT: 400A FUSES (3 PCS.)
LOCATION: MARVIN, NC



#### Dimensions (inches)



### Catalog Symbol: ECNR

Dual-Element, Time-Delay – 10 seconds (minimum) at 500% rated current

**Current-Limiting** 

Volts: 250Vac(or less) 125Vdc (110-200A) 250Vdc (225-600A)

Amps: 70 to 600A

IR: 200kA RMS Sym.

Agency Information: CE, UL Listed, Std. 248-12, Class RK5, Guide JDDZ, File E162363 CSA Certified, C22.2 No. 248.12, Class 1422-02, File 700489

#### **Features**

- Provides motor overload, ground fault and short-circuit protection.
- Helps protect motors against burnout from overloads and single-phasing when sized properly.
- Simplifies and improves blackout prevention (selective coordination).
- Dual-element fuses can be applied in circuits subject to temporary motor overloads and surge currents to provide both high performance short-circuit and overload protection.
- The overload element provides protection against low level overcurrent of overloads and will hold on inrush current which is five times greater than the amp rating of the fuse for a minimum of ten seconds.

### **Catalog Numbers (amps)**

450 to 600A

ECNR70	ECNR110	ECNR225	ECNR450
ECNR75	ECNR125	ECNR250	ECNR500
ECNR80	ECNR150	ECNR300	ECNR600
ECNR90	ECNR175	ECNR350	
ECNR100	ECNR200	ECNR400	

#### **Carton Quantity and Weight**

	Garton	weight p	<u>er Carton</u>	
<u>Amps</u>	<b>Quantity</b>	<u>lbs</u>	<u>kg</u>	
70-100	5	1.5	0.68	
101-200	1	0.77	0.35	
201–400	1	1.52	0.69	
401-600	1	3.0	1.4	

# Class RK5 Fuse Blocks (250V) Catalog Data

(Clip Retaining Spring Standard, Suffix "R")

Terminal Type (Suffix No.)
Basic Box Lug w/

		Catalog	_	Reinforced Clip
<u>Amps</u>	<u>Poles</u>	Number		CU only
70	1	R25100-1	CR	COR
to	2	R25100-2	CR	COR
100	3	R25100-3	CR	COR
110 to 200	1	R25200-1	CR	
225 to 400	1	R25400-1	CR	_
450 to 600	1	R25600-1	CR	*********
110 to 200	3	R25200-3	CR	
225 to 400	3	R25400-3	CR	
450 to 600	3	R25600-3	CR	<b></b>



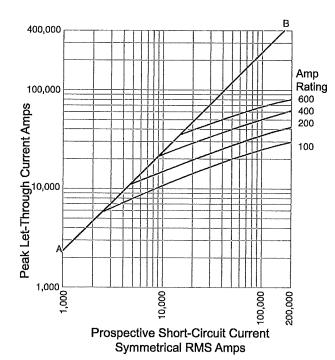
# **ECNR**

# Class RK5 250Vac, 70 to 600A Dual-Element, Time-Delay Fuses

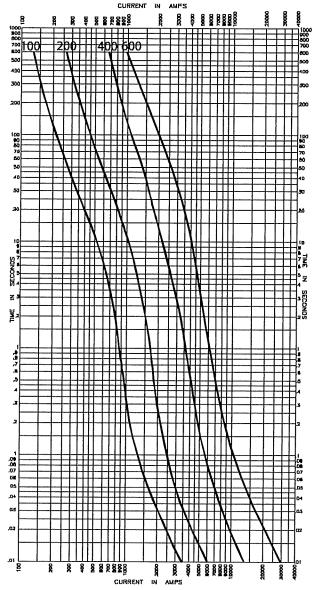
PROJECT: MARVIN VILLAGE PRODUCT: 400A FUSES (3 PCS.)

LOCATION: MARVIN, NC

### **Current Limitation Curves**



### Time-Current Characteristic Curves-Average Melt



#### **Fuse Reducers For Class R Fuses**

Equipment	Desired	Catalog Number
<u>Fuse Clips</u>	Fuse Size	(Pairs) 250V
200A	70-100A	No. 2621-R
400A	70-100A	No. 2641-R
	110-200A	No. 642-R
	70-100A	No. 2661-R
600A	110-200A	No. 2662-R
	225-400A	No. 2664-R*

<sup>\*</sup>Single reducer only (pair not required).

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BU-SB09409



**Project Name:** 

Marvin Village Hall

Project #:

2020-66

**Spec Section:** 

Submittal:

**Lighting Submittal** 

Notes:

Architect:

Urban Architectural Group

1242 Mann Drive, Suite 200

Matthews, NC 28105

704-841-1899

Electrical Engineer:

**Vrettos Pappas** 

**VP Engineering** 

2815 Coliseum Centre Drive

Charlotte, NC 28217

704-372-7755

Contractor:

Randolph Builders Inc. 1010 Colville Road Charlotte, NC 28207

704-588-7116

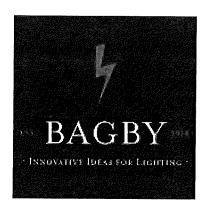
**Electrical Contractor:** 

YES Real Estate Construction Group Inc.

3724 National Drive, Suite 210

Raleigh, NC 27612 704-277-3948

YES Real Estate Construction Group Inc.'s review of this submittal is for conformance with the general design concept and for general arrangement only. Review and approval shall not be construed as to mean that any deviation from the requirements of the specifications and drawings is acceptable. The supplier of this material is responsible for meeting all requirements of the contract documents.



S L BAGBY CO 214 WEST TREMONT AVE SUITE 101 CHARLOTTE, NC 28203-5161 Phone: 704-334-2821 EXT:

Fax:

Contact: Taylor, Tom

# Marvin Village Hall - New Construction

21-55978-0 4/26/2021



Submitted By S L BAGBY CO

Type	Manufacturer/Brand	Catalog Number
A	ABL-Lithonia Lighting	2GTL 4 40L GZ10 LP830
B	ABL-Lithonia Lighting	4SEMW LED 30K 90CRI M6
<b>B</b> B1	ABL-Juno Lighting Group	IC1LEDFW 10LM 30K 90CRI MVOLT ZT10
B1 TRIM	ABL-Juno Lighting Group	14 BWH
E	ABL-Lithonia Lighting	LDN4 30/10 LO4AR LSS MVOLT GZ10
E1	ABL-Lithonia Lighting	LDN4 30/10 LO4AR LSS MVOLT GZ10 EL
F	ABL-Lithonia Lighting	C 2 32 MVOLT GEB10IS
H	ABL-Lithonia Lighting	WPX2 LED 40K MVOLT DDBXD
EXEM HO	ABL-Lithonia Lighting	LHQM LED R HO M6
RН	ABL-Lithonia Lighting	ERE GY T WP RD
ĒΧ	ABL-Lithonia Lighting	EXR LED M6
ĒΜ	ABL-Lithonia Lighting	ELM6L UVOLT LTP SDRT
wos	ABL-Acuity Brands Controls	WSX PDT WH
wos ov	ABL-Acuity Brands Controls	WSX PDT WH
cos	ABL-Acuity Brands Controls	CM PDT 10
ÞΡ	ABL-Acuity Brands Controls	PP20
DIMM	ABL-Acuity Brands Controls	SPODMRD WH
3W DIMM	ABL-Acuity Brands Controls	SPODMRA MWO D WH



Submitted By S L BAGBY CO Catalog Number 2GTL 4 40L GZ10 LP830





#### FEATURES & SPECIFICATIONS

 $\textbf{INTENDED USE} - \text{The 2GTL LED} \, recessed \, troffer \, offers \, a \, wide \, range \, of \, lumen \, packages, \, color \, temperatures, \, range \, of \, lumen \, packages, \, color \, temperatures, \, range \, of \, lumen \, packages, \, color \, temperatures, \, range \, of \, lumen \, packages, \, color \, temperatures, \, range \, of \, lumen \, packages, \, color \, temperatures, \, range \, of \, lumen \, packages, \, color \, temperatures, \, range \, of \, lumen \, packages, \, color \, temperatures, \, range \, of \, lumen \, packages, \, color \, temperatures, \, range \, of \, lumen \, packages, \, color \, temperatures, \, range \, of \, lumen \, packages, \, ra$ and lens options to meet the lighting needs for a wide range of applications such as schools, offices, and hospitals. The light engine delivers long life and excellent color to ensure a sound quality, low-maintenance lighting installation. Certain airborne contaminants can diminish the integrity of acrylic and/ or polycarbonate. Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.

Inward formed end flanges for safe handling. Includes integral T-bar clips. Lighter-weight fixture allows for safe, easy installation.

OPTICS — Highly transmissive pattern #12 lens diffuses the light source without compromising output. Pattern # 19 and satin white lens options also available.

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide extended service life. 80% LED lumen maintenance at 72,000 hours (L80/72,000).

eldoLED driver options deliver choice of dimming range, and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Optional nLight® embedded controls make each luminaire addressable - allowing it to digitally communicate optional intight embedded controls such as dimmers, switches, occupancy sensors and photocontrols. Simply connect all the nLight enabled control devices and the GTL luminaires using standard Cat-5 cabling. Unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission. Lumen Management: Unique lumen management system (option N80) provides onboard intelligence that actively manages the LED light source so that constant lumen output is maintained over the system life, preventing the energy waste created by the traditional practice of over-lighting.

The step-level dimming option (SLD) allows the system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.

Ballast disconnect is provided where required to comply with U.S. and Canadian codes.

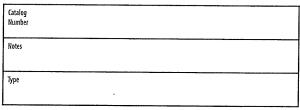
INSTALLATION — LED boards include plug-in connectors for easy of upgradeability. Suitable for direct insulation contact. Suitable for damp location.

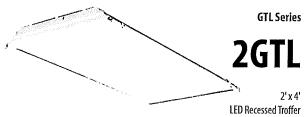
Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY - 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms and conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.



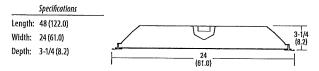












All dimensions are inches (centimeters) unless otherwise indicated.

# % Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background\*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background\*

To learn more about A+, visit <a href="https://www.acuitybrands.com/aplus">www.acuitybrands.com/aplus</a>.

\*See ordering tree for details



Submitted By S L BAGBY CO

Catalog Number 2GTL 4 40L GZ10 LP830

Notes

# **2GTL** LED Troffer



A+ Capable options indicated by this color background.

2GTL										
Series	Trlm type	Length	Lumens	ø	Door		Lens		Voltage	
2GTL 2'wide recessed LED luminaire	(blank) Grid F Overlapping flange	4 4'	30L 40L 48L 60L 72L 88L 100L 140L	3000 lumens 4000 lumens 4800 lumens 6000 lumens 7200 lumens 10000 lumens 14000 lumens	(blank) FN FM FW RN RM RW	Flush steel, white Flush aluminum, natural Flush aluminum, matte black Flush aluminum, white Regressed aluminum, natural Regressed aluminum, matte black Regressed aluminum, white	(blank) A12125 A19 SWL	#12 pattern acrylic, 0.110" thick #12 pattern acrylic, frosted, .125" thick #19 pattern acrylic, 0.156" thick Satin white	(blank) 120 277 347	MVOLT (120-277V 120V 277V 347V <sup>3</sup>

)river	Color temperature	Controls <sup>6</sup>	Options
EZ1 eldoLED dims to 1 %  GZ10 Dims to 10% (0-10V dimming)  GZ1 Dims to 1% (0-10V dimming)	LP830 3000 K LP835 3500 K LP840 4000 K LP850 5000 K	(blank) No controls   N80 nLight with 80% (1.80) lumen   management   N80EMG nUght with 80% (1.80) lumen	BDP Disconnect Plug  EL7L 700 lumen emergency battery (Noncompliant with CA T20) 5.7.8  EL14L 1400 lumen emergency battery (Noncompliant with CA T20) 5.7.8  E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title
SLD Step-level dimming <sup>4,5</sup>	LP850 5000 K	management for use with generator supply emergency power  N100 nLight without lumen management  N100EMG nLight without lumen management for use with generator supply emergency power	BGTD Bodine Generator Transfer Device %19,111 CP Chicago plenum PWS1836 6' pre-wire, 3/8" diameter, 18-gauge, 1-circuit PWS1846 6' pre-wire, 3/8" diameter, 18-gauge, 2-circuit ABC Door frame gasketing 12 GLR Fast-blowing fuse 13 GMF Slow-blowing fuse 13 LATC Earthquake clip NPLT Narrow pallet

#### Accessories: Order as separate catalog number.

DGA24 Drywall grid adapter for 2x4 recessed fixture. Surface Mount Troffer Kit Post Paint 2X4SMKSHP PAF Disconnect Plug (BDP), 2 Pole, Package of 1 RK8BDP 2P U RK8BDP 3P U Disconnect Plug (BDP), 3 Pole, Package of 1 Disconnect Plug (BDP), 2 Pole, Package of 10 RK8BDP 2P J10 RK8BDP 2P J40 Disconnect Plug (BDP), 2 Pole, Package of 40

#### Notes

- Approximate lumen output. Lumen output will vary depending
- upon lens option chosen. Not available with GZ10.
- Not available with SLD, EL7L, EL14L, E10WLCP or BGTD.

- Not available with 1001 and 1401.

  When using pre-wire option, use PWS1846.
  Not available with S10, G2T, G2T0.
  Not available with S10, G2T, G2T0.
  Not available with S10 or G2T or G2T0 when combined with any of the following lumen packages: 721, 881,1001 or 1401.
  Not available with E2T when combined with 1001 or 1401 lumen packages.
- packages.
- Not Available with SLD.

- Not Available with SLD.

  Not Available with SCD.

  Not Available with Controls options when ordered in combination with 100L or 140L lumen packages.

  Must specify voltage. Requires BSE labeling, voltage specific.

  Consult factory for options. Example: BGTD BSE10.

  Only available with aluminum door.

  Must specify voltage, 120 or 277.

  For CEC (T20) compliant option, substitute EL14L option with E10WLCP\*TEM self-diagnostic battery pack 10W constant power, CFC compliant.\*



Submitted By S L BAGBY CO Catalog Number 2GTL 4 40L GZ10 LP830

Notes

Туре

# **2GTL L**ED Troffer

Stock/Non-configurable models are offered for shorter lead times:

ORDERING INFORMATION								Egypte State (Sept.
Catalog Number	UPC	Description	Lumens	Color Temprature	Voltage	Wattage	Pallet qty,	Standard carton qty.
2GTL4 4400LM LP835	889804706598	2x4 LED lay-in troffer	4391	3500K	120-277	34.10	28	1
2GTL4 4400LM LP840	889804706956	2x4 LED lay-in troffer	4567	4000K	120-277	34.10	28	1
2GTL4 4400LM 347 LP835	889804710243	2x4 LED lay-in troffer, 347v	4391	3500K	347	38,11	28	1
2GTL4 4400LM 347 LP840	889804710359	2x4 LED lay-in troffer, 347v	4567	4000K	347	38.11	28	1
2GTL4 4400LM EL14L LP835 14	889804710045	2x4 LED lay-in troffer, emergency battery	4391	3500K	120-277	34.10	28	1
2GTL4 4400LM EL14L LP84014	889804710205	2x4 LED lay-In troffer, emergency battery	4567	4000K	120-277	34.10	28	1
2GTL4 5000LM LP835	889804710366	2x4 LED lay-in troffer	4867	3500K	120-277	38.79	28	1
2GTL4 5000LM LP840	889804710458	2x4 LED lay-in troffer	5062	4000K	120-277	38.79	28	1
2GTL4 5000LM 347 LP835	889804710489	2x4 LED lay-in troffer, 347v	4867	3500K	347	42.78	28	1
2GTL4 5000LM 347 LP840	889804710595	2x4 LED lay-in troffer, 347v	5062	4000K	347	42.78	28	1
2GTL4 5000LM EL14L LP835 14	889804710625	2x4 LED lay-in troffer, emergency battery	4867	3500K	120-277	38.79	28	1
2GTL4 5000LM EL14L LP84014	889804710700	2x4 LED lay-in troffer, emergency battery	5062	4000K	120-277	38.79	28	1





Submitted By S L BAGBY CO Catalog Number 2GTL 4 40L GZ10 LP830

Notes

Туре

# **2GTL L**ED Troffer

Performance Data											
Lumen Package	Lumens	Input Watts	LPW								
30L LP830	2923.34	23.3	125								
30L LP835	2983	23.3	128								
30LLP840	3102.32	23,3	133								
30L LP850	3161.98	23,3	136								
40L LP830	3843.56	29.83	129								
40L LP835	3922	29.83	131								
40L LP840	4078.88	29.83	137								
40L LP850	4157.32	29.83	139								
48L LP830	4681.46	35.79	131								
48L LP835	4777	35.79	133								
48L LP840	4968.08	35.79	139								
48L LP850	5063.62	35.79	141								
60L LP830	6093.64	48.82	125								
60L LP835	6218	48.82	127								
60L LP840	6466.72	48.82	132								
60L LP850	6591.08	48.82	135								
72L LP830	7203.98	53.32	135								
72L1P835	7351	53.32	138								
72L1P840	7645.04	53.32	143								
72L LP850	7792.06	53.32	146								
88L LP830	8563.24	65	132								
88L LP835	8738	65	134								
88L1P840	9087.52	65	140								
88L LP850	9262.28	65	143								
100L LP830	10449.74	82.75	126								
100L LP835	10663	82.75	129								
100L LP840	11089.52	82.75	134								
100L LP850	11302.78	82.75	137								
140L LP830	13306.44	110.25	121								
140L LP835	13578	110.25	123								
140L LP840	14121.12	110.25	128								
140L LP850	14392.68	110.25	131								

Note: Performance based on standard #12 pattern acrylic lens.

How to Estimate Delivered Lumens in Emergency Mode Use the formula below to estimate the delivered

lumens in emergency mode
Delivered Lumens = 1.25 x P x LPW

P = Ouput power of emergency driver. P = 10W for E10WLCP option.

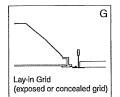
LPW = Lumen per watt rating of the luminaire.

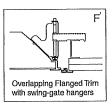
This information is available on the ARL luminaire.

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet. LPW = Lumen per watt rating of the luminaire. LPW information available in Performance Data section.

### **MOUNTING DATA**

Continuous row mounting of flanged units requires CRE and CRM trim options (see Options).





#### NOTE:

1 Recommended rough-in dimensions for F-trim fixtures 24"x48" (Tolerance is +1/4"-0"). Swing-gate range 1-3/16" to 3-15/16". Swing-gate span 23-3/8" to 26-11/16". Fixture swing-gate points require additional 1-1/16" over nominal fixture helght.



Submitted By

S L BAGBY CO

Catalog Number 2GTL 4 40L GZ10 LP830

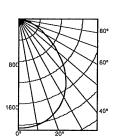
Notes

A

# **2GTL** LED Troffer

### **PHOTOMETRICS**

2GTL 4 48L LP835, 4878 delivered lumens, test no. ISF 36875P10, tested in accordance to IESNA LM-79.

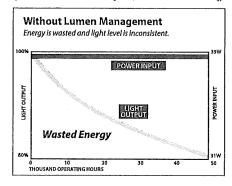


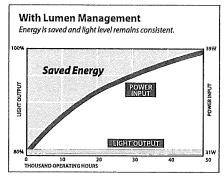
						pc		80%			70%			50%	
	Ave	Lumens	Zone	Lumens	% Lamp	wq	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	2057		0° - 30°	1592.7	32.6	0	119	119	119	116	116	116	111	111	111
5	2053	195	0° - 40°	2559,5	52.5	1	105	101	98	103	99	96	99	96	93
15	1985	560	0° - 60°	4133.7	84.7	2	93	87	81	91	85	80	88	83	79
25	1823	838	0° - 90°	4878.5	100.0	3	83	75	69	81	74	68	78	72	67
35	1552	967	90° - 120°	0.0	0.0	4	74	66	59	73	65	59	70	63	58
45	1168	899	90° - 130°	0.0	0.0	5	66	58	52	65	57	51	63	56	51
55	753	675	90° - 150°	0,0	0.0	6	60	52	46	59	51	45	58	50	45
65	420	422	90° - 180°	0.0	0.0	7	55	47	41	54	46	41	53	45	40
75	218	234	0° - 180°	4878,5	100.0	8	50	42	37	50	42	36	48	41	36
85	85	89	•	Efficiency		9	46	38	33	46	38	33	45	38	33
90	0					10	43	35	30	42	35	30	41	35	30

		50% be		10% be 105.	
	Inital FC				
Mounting	Center				
Height	Beam	Diameter	FC	Diameter	FC
8.0	61,9	6,9	30,9	14.4	6.2
10.0	34.8	9.5	17.1	19,7	3,3
12,0	22.1	12.0	10,8	24.9	2.1
14.0	15.3	14,5	7.4	30.1	1.4
16.0	11,2	17.0	5.4	35.4	1.0

### **Constant Lumen Management**

Enabled by the embedded nlight control, the GTL actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.







Submitted By S L BAGBY CO Catalog Number 4SEMW LED 30K 90CRI M6

Notes

B





Catalog Number				
Notes		******	 	***************************************
Туре			 	

# Contractor Select™

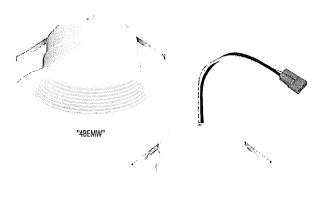
# 4BEMW/4SEMW LED

4" LED Module

Utilizing friction clip retention, the economical, E-Series LED downlight fits most manufacturers 4" recessed can-style housings. It can be dimmed down to 10% and maintains 70% light output after 54,000 hours of use. Ideal for both retrofitting and new construction in a variety of residential and light commercial settings such as multi-family residences, retail shops and offices.

#### FEATURES:

- 4BEMW available in 3 color temperatures; 2700K, 3000K or 4000K.
- 4SEMW available in 3000K
- Wet Location listed for indoor and outdoor installations.
- E26 adapter included, except for the 4BEMW LED 27K version in the state of California (L/SKTWHIP option must be selected).











4SEMW



Catalog Number	UPC	Description	Replaces up to	Lumens	Input Watts	ССТ	CRI	Voltage	Finish	Pallet qty.
4BEMW LED 27K 90CRI M61	190887266719	4" LED Module	65 Watt Incandescent	650	9.8W	2700K	90	120V	White	576
4BEMW LED 30K 90CRI M6	190887266702	4" LED Module	65 Watt Incandescent	700	9.8W	3000K	90	120V	White	576
4BEMW LED 40K 90CRI M6	190887266733	4" LED Module	65 Watt Incandescent	720	9.8W	4000K	90	120V	White	576
4SEMW LED 30K 90CRI M6	191848772614	4" LED Module	65 Watt Incandescent	700	9.8W	3000K	90	120V	White	576

 $More \ configurations \ are \ available. \ \underline{Click\ here}\ or\ visit\ www.acuity brands. com\ and\ search\ for\ 4BEMW\ LED\ or\ 4SEMW\ LED.$ 

### Compatible Dimmer Switches

Companible Diminer Switches										
	Manufacturer	Model/Series	Part Numbers	Type						
	Leviton	Decora	6633-P	600W Incandescent						
		Ariandni C-L	AYCL-153P	150W CFL/LED or 600W Incandescent						
	Lutron	Contour C-L	CTCL-153P	150W CFL/LED or 600W Incandescent						
		Diva C-L	DVCL-153P	150W CFL/LED or 600W Incandescent						
	Pass & Seymour	Harmony	HCL453PTCCCV6	450W LED and CFL						
	Synergy	ISD	ISD 600   120*	600W Incandescent						

<sup>\*\*</sup>Must have minimum of qty 6 LED modules on a circuit to function.

#### NOTES

 L/SKTWHIP option must be added for product shipping to California.



Submitted By S L BAGBY CO Catalog Number 4SEMW LED 30K 90CRI M6

Note

B





### Specifications

### INTENDED USE:

Our recessed LED module is the most economical means to create a well lit environment with exceptional energy efficiency and near zero maintenance. Great for retrofit into existing downlight cans or new construction and remodel applications. Compliant friction clip retention allows itment into nearly 100% of installed cans. The LED module maintains at least 70% light output for 54,000 hours. Indoor and outdoor use.

### CONSTRUCTION:

4BEMW has an aluminum spun reflector with deep baffle configuration for reduced glare. Combined LED and driver printed circuit board attached. Inner reflector cone funnels light through the pressed-in diffused lens.

### **OPTICS:**

Diffused lens at end of mixing chamber to provide even light distribution for general illumination, equivalent to 65W BR30 Lamp. Wide flood beam angle at > 45°.

### ELECTRICAL:

Center 2 Edge™ (patent pending) technology created for a single point source. Primary power disconnect provided for simple connection to a dedicated LED connector in the housing. Dimming down to 10%. For compatible dimmers, refer to Compatible Dimmers Chart. 700-lumen E series has an input wattage of 9.8 wats, 71 lumens per watt, equivalent to 65-watt incandescent. E Series' patent pending driver has zero inrush which allows power loads to be calculated with actual rated wattages. Example: 61 units of 4BEMW LED fixtures can be installed in line with a 600-watt dimmer. 600W/9.8W. = 61 fixtures.

### INSTALLATION:

Suitable for installation in standard height rough-in sections. E26 socket adapter ships standard, except for the 4BEMW LED 27K version in the state of California (USKTWHIP option must be selected). Friction clips allow fitment into cans with an inside diameter of 4.0" to 4.5".

### LISTINGS:

CSA certified to US and Canadian safety standards. ENERGY STAR® certified. Can be used to comply with California Title 24 Partó High Efficacy LED Light Source Requirements. Wet location listed. WSEC ASTM E283 for Air-Tight (with IC housings).

### WARRANTY

5-year limited warranty. Complete warranty terms located at: <a href="https://www.acuitybrands.com/CustomerResources/Terms">www.acuitybrands.com/CustomerResources/Terms</a> and conditions.aspx

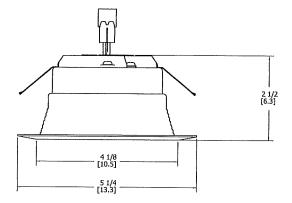
Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice. PATENTS PENDING.

### **Dimensions**

Aperture: 4-1/8 (10.5) Ceiling opening: Determined by rough-in Overlap trim: 5-1/4 (13.3) Height: 2-1/2 (6.3)

All dimensions are inches (centimeters) unless otherwise indicated.



Submitted By

Catalog Number IC1LEDFW 10LM 30K 90CRI MVOLT ZT10

Note

B<sub>1</sub>

# JUNO<sup>®</sup>

# FIREWALL™ LED Downlight Series

S L BAGBY CO

4" Fire-Rated Integrated LED Downlight New Construction

# IC1LEDFW Series

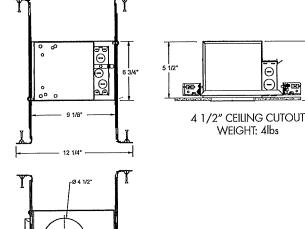


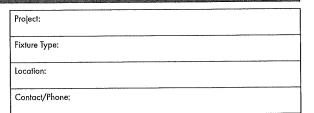






### mensions





### **Product Features**

Dedicated small aperture 4" LED performance fire-rated downlight solution with integral light engine delivering up to 1400 lumens and compatible with a comprehensive selection of standard Juno trims Patent pending integrated low smoke intumescent barrier

- Eliminates the need for installers to build additional boxes around fixtures to meet fire ratings
- Provides protection against the spread of heat and flames into the ceiling cavity for 1 hour or 2 hour fire ratings
- Reduces sound transmission between floors

Easy installation and servicability

- Low profile integrated LED downlight less than 6" in height
- Easy to handle compact size weighing only 4 lbs
- Installs into wood joists with Real Nail® 3 bar hangers

**Applications** 

- Residential and commercial applications including multi-family, hotels, assisted living, dormitories and other multi-level construction
- Shallow plenum, new construction
- IC rated for direct contact with insulation

Fire Resistance Specifications:

- Conforms to UL263, ASTM STD E119 and CAN/ULC-S101 for US and Canadian installations
- May be used in fire resistance floor-ceiling and roof-ceiling designs per UL Fire Classified Directories CDHW and CDHW7
- 1 hour fire rated floor/ceiling and roof/ceiling gypsum assembly per UL Design No. L500 & P500
- 2 hour fire rated floor/ceiling gypsum assembly per UL Design No. 1500, 1505, 1511, 1536, 1538, 1541, 1556, 1577, M500, M510, M521 & M543

### **Performance**

Delivered Lumens	700L, 1000L, 1400L
LED Color Temperature	27K, 30K, 35K, 40K
Optional	30K, 700L <b>Warm</b> Dim
CRI	90+
Voltage	Dedicated 120V or MVOLT (120-277V)
Dimming	Forward/Reverse Phase or 0-10V
Optics	Narrow Flood or Wide Flood

For use with standard Juno downlight trims:

Baffle

Cone

Hyperbolic

Wall Wash

Lensed

Squa

Decorative















Submitted By S L BAGBY CO Catalog Number

IC1LEDFW 10LM 30K 90CRI MVOLT ZT10

**B**1

Notes

# JUNO"

FIREWALL™ LED Downlight Series
4" Fire-Rated Integrated LED Downlight
New Construction

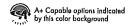


# ORDERING INFORMATION Housing and trim can be ordered together or separate, but will always ship separately.

<b>4" Flourings</b> xample: ICILEDFW 10LM 30K 90CRI WFL 12i	O FRPC				
Series ICILEDFW 4" LED Firewall IC New Construction Downlight	Lumens   O7LM   700 Nominal Lumens   10LM   1000 Nominal Lumens   14LM   1400 Nominal Lumens	Color Temperature 27K 2700K 30K 3000K 35K 3500K 40K 4000K	CRI   90CRI 90+CRI	Distribution     [blonk) Medium Flood (45°)     WFL Wide Flood (65°)	Voltage/Driver   120 F Forward / Reverse Phase Cut, 5% dim     MVOLT ZT10

### **Warm**Dim

WarmDim Option  Example: ICILEDFW WD 07LM 30K 90C	RI 120V FRPC					
Series IC1LEDFW 4" LED Firewall IC Net Construction Downligh		Lumens 07LM 700 Nominol Lumens	Color Temperature 30K 3000K	CRI 90CRI 90+ CRI	Distribution (blank) Medium Flood (45°) WFL Wide Flood (65°)	Voltage/Driver 120 FRPC 120V Forward/Reverse Phase Cut, 5% dim



### IC1LEDFW - Compatible Trims

### OPEN/DOWNLIGHT TRIMS

Trim Series	Dimensions	Aperture	Catalog No.		Notes
	4	3-3/8"	14 BRZ	4" Downlight Baffle Trim - Black, Bronze	
	ALETTALLA		14 BBL	4" Downlight Baffle Trim - Black, Black Trim Ring	24
			14 BSC	4" Downlight Baffle Trim - Black, Satin Chrome	24 744
	5"		14 BWH	4" Downlight Baffle Trim - Black, White Trim Ring	
Baffle			14 WWH	4" Downlight Baffle Trim - White, White Trim Ring	
		3-3/8"	17 BWH	4" Downlight Cone Trim - Black Cone, White Trim Ring	
(11)	WALLAN		17 CWH	4" Downlight Cone Trim - Clear Alzak® Cone, White Trim Ring	24
, 1 h			17 GWH	4" Downlight Cone Trim - Gold Cone, White Trim Ring	TENTO CANAL
	5*		17 HZWH	4" Downlight Cone Trim - Haze Cone, White Trim Ring	
Cone	, ,		17 PTSC	4" Downlight Cone Trim - Pewter Cone, Satin Chrome Trim Ring	
			17 WHZBRZ	4" Downlight Cone Trim - Wheat Haze Cone, Bronze Trim Ring	
			17 WHZWH	4" Downlight Cone Trim - Wheat Haze Cone, White Trim Ring	
			17 WWH	4" Downlight Cone Trim - White Cone, White Trim Ring	

### PINHOLE TRIM

**Trim Series** Dimensions Catalog No. Aperture 13 WH 4" Pinhole with Integral Shield - White





Pinhole with Integral Shield

Submitted By S L BAGBY CO Catalog Number IC1LEDFW 10LM 30K 90CRI MVOLT ZT10

Notes

Type B1

# JUNO"

FIREWALL™ LED Downlight Series
4" Fire-Rated Integrated LED Downlight
New Construction

### IC1LEDFW - Compatible Trims

H	Y	P	E	R	B	0	L	C	T	R	IM	
---	---	---	---	---	---	---	---	---	---	---	----	--

Trim Series	Dimensions	Aperture	Catalog No.		Notes	
4" Hyperbolic	5"-	3-3/8"	17HYP2 BWH 17HYP2 CWH 17HYP2 HZWH 17HYP2 WHZBRZ 17HYP2 WHZWH 17HYP2 WHZWH	4" Downlight Cone Trim - Black Cone, White Trim Ring 4" Downlight Cone Trim - Clear Alzak® Cone, White Trim Ring 4" Downlight Cone Trim - Haze Cone, White Trim Ring 4" Downlight Cone Trim - Wheat Haze Cone, Bronze Trim Ring 4" Downlight Cone Trim - Wheat Haze Cone, White Trim Ring 4" Downlight Cone Trim - White Cone, White Trim Ring		24

### WALL WASH TRIM

Trim Series	Dimensions	Aperture	Catalog No.		Notes
1 m	5'-			4" Downlight Wall Wash Cone Trim - Clear Alzak®, White Trim Ring 4" Downlight Wall Wash Cone Trim - Haze, White Trim Ring 4" Downlight Wall Wash Cone Trim - Wheat Haze, White Trim Ring 4" Downlight Wall Wash Cone Trim - White, White Trim Ring	24 24
4" Lensed Wall					

### LENSED TRIMS

Wash

Trim Series	Dimensions	Aperture	Catalog No.		Notes
( )			11 WH	4" Lensed Drop Opal Trim - White	enthesis:
Drop Opal	5"				•
Frosted Lens w/	5'		12 WWH 12 WSC 12 WBRZ	4" Frosted Lens with Clear Center Trim - White, White Trim Ring 4" Frosted Lens with Clear Center Trim - Perimeter Frosted Lens, Satin Chrome Trim Ring 4" Frosted Lens with Clear Center Trim - Perimeter Frosted Lens, Bronze Trim Ring	Allers 24
Clear Center					*
			4101 BRZ 4101 SC 4101 WH	4" Decorative Beleved Dome Lens Trim - Bronze 4" Decorative Beleved Dome Lens Trim - Satin Chrome 4" Decorative Beleved Dome Lens Trim - White	Allerin
Beyeled Dome Lensed	5°				-
			4102 BRZ	4" Decorative Beleved Lens Trim - Bronze	





4102 SC 4102 WH 4" Decorative Beleved Lens Trim - Bronze 4" Decorative Beleved Lens Trim - Satin Chrome 4" Decorative Beleved Lens Trim - White

Beveled Lensed



Submitted By S L BAGBY CO

Catalog Number IC1LEDFW 10LM 30K 90CRI MVOLT ZT10

B<sub>1</sub>

Notes

# JUNO"

FIREWALL™ LED Downlight Series 4" Fire-Rated Integrated LED Downlight New Construction

### IC1LEDFW - Compatible Trims

### SQUARE TRIMS

Trim Series	Dimensions	Aperture	Catalog No.	Notes
Square Downlight	5'—	2-5/32"	17SQ BWH 4" Square Downlight Trim - Black, White Trim Ring 17SQ HZWH 4" Square Downlight Trim - Haze, White Trim Ring 17SQ WHZWH 4" Square Downlight Trim - Wheat Haze, White Trim Ring 17SQ WWH 4" Square Downlight Trim - White, White Trim Ring	24
AND		1-1/4"	13SQ WH 4" Square Pinhole Trim - White	



Square Pinhole



125Q WH

4" Square Frosted Lens with Clear Center Trim - White, White Trim Ring







# With Clear Center

Square Frosted Lensed

Trim Series	Dimensions	Aperture	Catalog No.		Notes
(a)		3"	4103 FROSTWH 4103 FROSTSC	4" Decorative Beveled Cylinder Trim - Frosted Glass, White Trim 4" Decorative Beveled Cylinder Trim - Frosted Glass, Satin Chrome Trim	24
Beveled Cylinder	5"				
Beveled Cone	5"	3-3/8"	4104 HZSC 4104 WHZBRZ	4" Decorative Beveled Cone Trim - Haze, Satin Chrome Trim 4" Decorative Beveled Cone Trim - Wheat Haze, Bronze Trim	244 244
poyelou conc		2-5/8"	4150 MESHSC	4" Decorative Glass Cylinder Trim - Mesh Glass, Satin Chrome Trim	-





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Submitted By S L BAGBY CO Catalog Number IC1LEDFW 10LM 30K 90CRI MVOLT ZT10

Notes

**IGHEDEW** 

# JUNO<sup>°</sup>

# FIREWALL™ LED Downlight Series

4" Fire-Rated Integrated LED Downlight New Construction

### **Specifications**

LED Light Engine

LED array attached to high purity aluminum, thermally conductive inner housing provides superior heat transfer to ensure long life of the LED Replaceable light engine mounts directly to inner housing assembly and incorporates the latest generation, high lumen output LED array • LEDs are binned within a 3-step MacAdam Ellipse exceeding ENERGY STAR® requirements for superior fixture to fixture color uniformity • 2700K, 3000K, 3500K, or 4000K color temperatures available • 90 CRI minimum

Proprietary patented micro processor controlled light engine emulates dimming performance of incandescent light source • Replaceable light engine attached to high purity aluminum, thermally conductive inner housing provides superior heat transfer to ensure long life of the LEDs • 3000K color temperature at full lumen output and warms to 2000K • 90 CRI minimum throughout dimming range • Design covered under Patent US 8,710,754.

**Optical System** 

Optical system

Two field interchangeable optics available in medium flood (45° beam angle) and wide flood (65° beam angle) • Computer-optimized reflector design with high reflectance finish coupled with a high transmission diffusing lens conceals the LEDs and produces uniform aperture luminance.

ver choice of dedicated 120 volt (120) driver or universal voltage (MVOLT) drivers that accommodate input voltages from 120-277 volts AC at 50/60Hz

• Power factor > 0.9 at 120V input • 120 volt only driver is dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage wall box dimmers • Universal voltage drivers are dimmable with the use of most 0-10V wall box dimmers • For a list of compatible dimmers, see  $\underline{\text{JUNOICLED-DIM}}$   $\bullet$  Easily accessible from below the ceiling via patent pending integrated intumescent flaps.

**Housing**Designed for use in IC (insulated ceiling) or non-IC construction • Powder coated steel housing sealed for Air-Loc® compliance • Integrated patent pending continuous single layer low smoke intumescent barrier ships assembled in housing for fire resistance ullet Housing is vertically adjustable to accommodate up to a 1 ½" ceiling thickness

### Junction Box

Pre-wired junction box provided with (6) ½" and (1) ¾" knockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire • UL listed and cUL listed for through-branch wiring, maximum of 6 #12 branch circuit conductors Junction box provided with removable access plates
 Knock-outs equipped with pryout slots . Quick connect electrical connectors supplied as standard for fast, secure installation.

22-gauge die-formed galvanized steel mounting frame • Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation • Pre-installed flame resistant Air-Loc gasket applied to

Real Nail 3 Bar Hangers

Patented (US Patent D552,969) Real Nail® 3 bar hangers: telescoping system permits quick placement of housing any where within 24" O.C. joists

Includes removable nail for repositioning of fixture in wood joist construction

ENERGY STAR® Certified when used with select trims • Certified to the high efficacy requirements of California T24 JA8-2019 with select trims • UL listed for U.S. and Canada through-branch wiring, damp locations • Lensed trims listed for wet location (covered ceiling) • UL and cUL • Conforms to UL 263, ASTM STD E119 and CAN/ULC-S101 • May be used in fire resistance floorceiling and roof-ceiling designs per UL Fire Classified Directories CDHW and CDHW7 • ASTM E283 certified Air-Loc

LED housing is designed to provide 50,000 hours of life • 5 year limited warranty on LED components.

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions

Specifications subject to change without notice.

### FIFCTRICAL DATA

ELECTRICAL D									
Dedicated 120V Only Driver Option (120 FRPC)									
	700L	700L WD	1000L	1400L					
Input Power	8.6W (+/-5%)	10W (+/-5%)	11.6W (+/-5%)	17.3W (+/-5%)					
Input Current	0.07A	A80.0	0.10A	0.15A					
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz					
EMI/RFI	FCC Title 47 CFR, Port 15, Closs B (residential)	FCC Title 47 CFR, Port 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Port 15 Class B (residential)					
Minimum storting temp	-25°€	-20°C	-25°C	-25°C					

### **ELECTRICAL DATA**

Universal Voltage

	MVOLT ZT10, ZT1, EZ10 & EZ1											
	70	OCL	10	00L	1400L							
	120V	2777	120V	277V	120V	277V						
Input Power	8.3W (+/-5%)	8.9W (+/-5%)	11.2W (+/-5%)	12.2W (+/-5%)	16W (+/-5%)	16.6W (+/-5%)						
'nout Current	0.07A	0.03A	0.10A	0.05A	0.14A	0.06A						
uency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz						
cMI/RFI	FCC Title 47 CFR, Port 15, Closs B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Port 15, Class B (residential)	FCC Title 47 CFR, Port 15, Closs B (residential)						
Alinimum starting temp	-20°C	-20°C	-20°€	-20°C	-20°C	-20°C						



Submitted By S L BAGBY CO

Catalog Number LDN4 30/10 LO4AR LSS MVOLT GZ10

Notes



### **FEATURES & SPECIFICATIONS**

 $\textbf{INTENDED USE} \ \_ \ \textbf{Typical applications include corridors, lobbies, conference rooms and private offices.}$ CONSTRUCTION — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by torsion springs.

Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment. Two combination 1/2"-3/4" and four 1/2" knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out). No. 12 AWG conductors, rated for 90°C.

Accommodates 12"-24" joist spacing.

Passive cooling thermal management for 25°C standard; high ambient (40°C) option available. Light engine and drivers are accessible from above or below ceiling.

Max ceiling thickness 1-1/2".

OPTICS — LEDs are binned to a 3-step SDCM; 80 CRI minimum. 90 CRI optional.

LED light source concealed with diffusing optical lens.

General illumination lighting with 1.0 S/MH and 55° cutoff to source and source image.

Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors.

ELECTRICAL — Multi-volt (120-277V, 50/60Hz) 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.

0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled.

70% lumen maintenance at 60,000 hours.

LISTINGS — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IP55 rated, ENERGY STAR® certified product.

WARRANTY - 5-year limited warranty. Complete warranty terms located at:

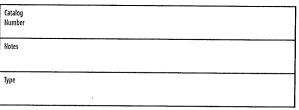
www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.







4" Open and WallWash LED

**New Construction Downlight** 













ORDERING INFORMA	TION Lead times w	ill vary depending on options se	elected. Consult with your	sales representative.		Example: LDN43	5/15 LO4AR LSS MVOLT EZ
LDN4 Series  LDN4 4" round	Color temperature 27/ 2700K 30/ 3000K 35/ 3500K 40/ 4000K 50/ 5000K	07 750 lumens 2 10 1000 lumens 3	20 2000 lumens 25 2500 lumens 30 3000 lumens 4000 lumens	Aperture/Trim Colo  LO4 Downlight LW4 Wallwash	R Clear WR <sup>2</sup> White BR <sup>2</sup> Black	Finish  LSS Semi-specular  D Matte diffuse LS Specular	Voltage     Multi-volt     120   120V   277   277V   347³   347V

Driver	Options			
GZ10 0-10V driver dims to 10% GZ1 0-10V driver dims to 1% EZ10 0-10V driver dims to 1% smooth and flicker-free deep dimming performance down to 10% EZ1 0-10V eldoLED driver with smooth and flicker-free deep dimming performance down to 19% D10 Minimum dimming 10% driver for use with JOT D1 Minimum dimming 1% driver for use with JOT EDAB eldoLED DALI SOLDRIVE dim to dark	SF4 TRW5 TRBL6 EL5 ELR5 ELSD5 ELRSD5 E10WCP5 E10WCP8 NPP16D210 NPP16DER210	Single fuse White painted flange Black painted flange Black painted flange Emergency battery pack with integral test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS Emergency battery pack with remote test switch. 10W Constant Power, Not Certified in CA Title 20 MAEDBS Emergency battery pack with self-diagnostics, 10W Constant Power, integral test switch. Not Certified in CA Title 20 MAEDBS Emergency battery pack with self-diagnostics, 10W Constant Power, remote test switch. Not Certified in CA Title 20 MAEDBS Emergency battery pack, 10W Constant Power with Integral test switch. Certified in CA Title 20 MAEDBS Emergency battery pack, 10W Constant Power with remote test switch. Certified in CA Title 20 MAEDBS Ilight* network power/relay pack with 0-10V dimming for non-eldol.ED drivers (GZ10, GZ1). ER controls fixtures on emergency circuit.	N80 <sup>1</sup> JOT <sup>11</sup> NPS80EZER <sup>2,10</sup> NPS80EZER <sup>2,10</sup> HAO <sup>11</sup> CP <sup>12</sup> RRL NLTAIRER <sup>2,0</sup> NLTAIRER <sup>2,10</sup> USPOM 90CRI	nLight**Lumen Compensation Wireless room control with "Just One Touch" pairing nLight* dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1). EZ1). ER controls fixtures on emergency drcult. High ambient option (40°C) Chicago Plenum RELOC**-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRL for complete nomenclature. Available only in RRLA, RRLB, RRLAE, and RRLC12S. nLight* Air enabled nLight* Air enabled nLight* Air of Dimming Pack Wireless Controls. Controls fixtures on emergency circuit, not available with battery pack options nLight* Air Dimming Pack Wireless Controls. UL924 Emergency Operation, via power interrupt detection. Available with bat- tery pack options. US point of manufacture High CRI (90+1)

- Overall height varies based on lumen package; refer to dimensional chart on page 3.
- Not available with finishes.
- Not available with emergency options.
- Must specify voltage 120V or 277V.
- 12.5" of plenum depth or top access required for battery pack maintenance.
- Available with clear (AR) reflector only.

- Specify voltage. ER for use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
- Fixture begins at 80% light level. Must be specified with NPS80EZ or
- NPS80EZ ER. Only available with EZ10 and EZ1 drivers Not available with CP, NPS80EZ, NPS80EZER, NPP16D, NPP16DER or
- 10 NLTAIR2, NLTAIRER2 and NLTAIREM2 not recommended for metal ceiling installations.
- 11 Fixture height is 5-11/16" for all lumen packages with HAO.
- 12 Must specify voltage for 3000lm. Not available with emergency
- battery pack option.

  Must specify D10 or D1 driver. Not available with nLight options. Not available with CP. Not recommended for metal ceiling installation. Not for use with emergency backup power systems other than battery



Submitted By S L BAGBY CO Catalog Number LDN4 30/10 LO4AR LSS MVOLT GZ10

Notes

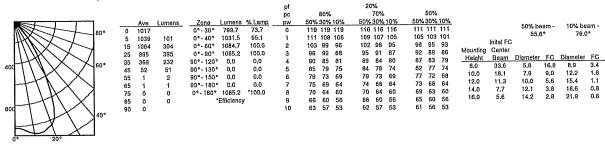
Туре

### LDN4

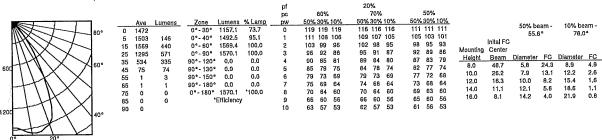
### **PHOTOMETRY**

Distribution Curve	Distribution Data	Output Data	Coefficient of Utilization	Illuminance Data at 30" Above Floor for
Distribution curve	Distribution Data	Output butu		a Single Luminaire

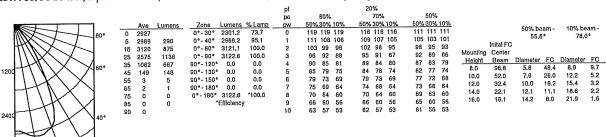
**LDN4 35/10 LO4AR**, input watts: 10.58, delivered lumens: 1085.2, LM/W = 102.57, spacing criterion at 0 = 1.04, test no. ISF 30712P229.



**LDN4 35/15 LO4AR**, input watts: 17.5, delivered lumens: 1570.1, LM/W = 89.72, spacing criterion at 0 = 1.04, test no. ISF 30712P234.



**LDN4 35/30 LO4AR**, input watts: 32.1, delivered lumens: 3122.6, LM/W = 88.52, spacing criterion at 0 = 1.04, test no. ISF 30712P249.





Submitted By S L BAGBY CO

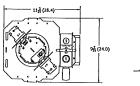
Catalog Number LDN4 30/10 LO4AR LSS MVOLT GZ10

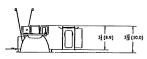
Notes

### LDN4

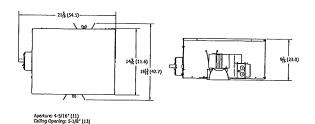
\* All dimensions are inches (centimeters) unless otherwise noted.

### **LDN4 500 - 2000 LUMENS**

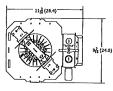


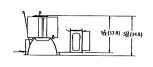


LDN4 CP

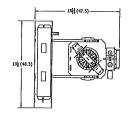


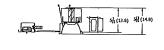
### LDN4 2500 - 4000 LUMENS





LDN4 EL





DN4			
Nominal	Lumens	Wattage	Lm/W
500	523.6	5.74	91.2
750	751.1	8,6	87.3
1000	1045	10.58	98.8
1500	1512	17.5	86.4
2000	2006	22.12	90.7
2500	2551	26.1	97.7
3000	3007	32.1	93.7
4000	4212	43	98.0

CUMENO	UTPUT MULT	PLIERS-COT			
	2700K	3000K	3500K	4000K	5000K
80CRI	0.950	0.966	1.000	1.025	1.101

### HOW TO ESTIMATE DELIVERED LUMENS IN EMERGENCY MODE

Use the formula below to estimate the delivered lumens in emergency mode

### Delivered Lumens = 1.25 x P x LPW

P = Ouput power of emergency driver. P = 10W for PS1055CP

 $\label{eq:LPW} \textbf{LPW} = \textbf{Lumen per watt rating of the luminaire}. This information is available$ on the ABL luminaire spec sheet.

The LPW rating is also available at Designlight Consortium.

LUMEN OUTPUT MULTIPLIERS - FINISH								
	Clear (AR)	White (WR)	Black (BR)					
Specular (LS)	1.0	N/A	N/A					
Semi-specular (LSS)	0.950	N/A	N/A					
Matte diffuse (LD)	0.85	N/A	N/A					
Painted	N/A	0.87	0.73					

### Notes

- Tested in accordance with IESNA LM-79-08.
- $\bullet \ \ \text{Tested to current IES and NEMA standards under stabilized laboratory conditions}.$
- · CRI: 80 typical.



Submitted By S L BAGBY CO LDN4 30/10 LO4AR LSS MVOLT GZ10

### LDN4

### **ADDITIONAL DATA**



The Sensor Switch JOT enabled solution offers a wireless, app-free approach to single room lighting control. JOT enabled products use Bluetooth® Low Energy (BLE) technology to enable wireless dimming and switching.

### Diagram







1. Power: Install JOT enabled fixtures and controls as

2. Pair: Insert the pairing tool into the pinhole on the wall

switch; press and hold any button for 6 seconds.

Play: Once paired, each fixture will individually dim down to 10% brightness. All products will be fully functional.

LDN4 Series



Sensor Switch WSXA JOT

COMPAT	<b>IBLE 0-10V WALL-MOUNT DIMM</b>	ERS
MANUFACTURER	PART NO.	POWER BOOSTER AVAILABLE
	Diva® DVTV	
1	Diva® DVSCTV	
Lutron*	Nova T* NTFTV	
	Nova* NFTV	
	AWSMT-7DW	CN100
	AWSMG-7DW	PE300
Leviton®	AMRMG-7DW	
	Leviton Centura Fluorescent Control System	]
	IllumaTech® IP7 Series	
	ISD BC	
Synergy*	SLD LPCS	RDMFC
	Digital Equinox (DEQ BC)	
Douglas Lighting Controls	WPC-5721	
	Tap Glide TG600FAM120 (120V)	_
Entertainment Technology	Tap Glide HeatsInk TGH1500FAM120 (120V)	]
	Oasis OA 2000 FAMU .	
U	EL7315A1019	EL7305A1010
Honeywell	EL7315A1009	(optional)
	Preset slide: PS-010-IV and PS-010-WH	]
	Preset slide: PS-010-3W-IV and PS-010-3W-WH	]
HUNT Dimmina	Preset slide, controls FD-010: PS-IFC-010-IV and PS-IFC-010-WH-120/277V	
•	Preset slide, controls FD-010: PS-IFC-010-3W-IV and PS-IFC-010-3W-WH-120/277V	
	Remote mounted unit: FD-010	1
Lehigh Electronic Products	Solitaire	PBX
PDM Electrical Products	WPC-5721	
ield Controls	TR61 with DALI interface port	RTO3 DALInet Router
actStopper®	LS-4 used with LCD-101 and LCD-103	

### **4** Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to  $provide\ consistent\ color\ appearance\ and\ out-of-the-box\ control\ compatibility\ with$ simple commissioning.

- · All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background\*
- · This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background\*

To learn more about A+, visit www.acuitybrands.com/aplus.

\*See ordering tree for details





Submitted By S L BAGBY CO Catalog Number

LDN4 30/10 LO4AR LSS MVOLT GZ10

Notes

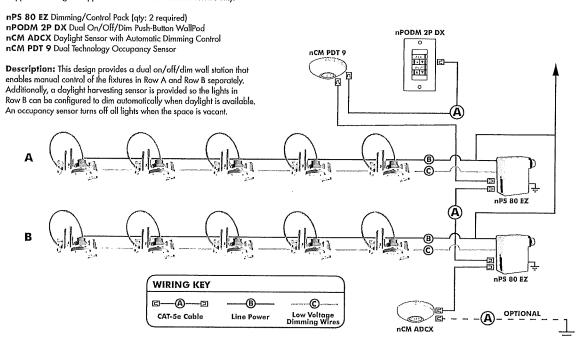
# Туре

### LDN4

### **EXAMPLE**

Group Fixture Control\*

\*Application diagram applies for fixtures with eldoLED drivers only.



### **Choose Wall Controls**

nLight offers multiple styles of wall controls - each with varying features and user experience.





**Push-Button Wallpod** Traditional tactile buttons and LED user feedback

Graphic Wallpod Full color touch screen provides a sophisticated look and feel

	nLight <sup>©</sup>	Wired Controls Accessories	::					
Order as separate catalog number. Visit <a href="https://www.acuitybrands.com/products/controls/nlight">www.acuitybrands.com/products/controls/nlight</a> for complete listing of nLight controls.								
WallPod Stations	Model number	Occupancy sensors	Model Number					
On/Off	nPODM (Color)	Small motion 360°, ceiling (PIR/dual Tech)	nCM 9 / nCM PDT 9					
On/Off & Roise/Lower	nPOD DX (Color)	Large motion 360°, ceiling (PIR/dual tech)	nCM 10 / nCM PDT 10					
Graphic Touchscreen	nPOD GFX (Color)	Wide View (PIR/dual tech)	nWV 16 / nWV PDT 16					
Photocell controls	Model Number	Wall Switch w/ Raise/Lower (PIR/dual tech)	nWSX LV DX / nWSX PDT LV DX					
Dimming	nCM ADCX	Cat-5 cables (plenum rated)	Model Number					
		10', CATS 10FT	CATS 10FT J1					
		15, CATS 15FT	CATS 15FT J1					

### nLight\* AIR Control Accessories:

Order as separate catalog number. Visit www.acultybrands.com/products/controls/nlightair.

**Wall switches** 

Model number

On/Off single pole

rPODB [color]

On/Off two pole

rPODB 2P [color]

On/Off & raise/lower single pole

On/Off & raise/lower two pole

rPODB DX [color] rPODB 2P DX [color]

rPODBZ DX WH

On/Off & raise/lower single pole

1 Can only be ordered with the RES7Z zone control sensor version.

### nLight AIR

nLight AIR is the ideal solution for retrofit or new construction spaces where adding communication is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each Lithonia LDN Luminaire. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.







### Simple as 1,2,3

- 1. Install the nLight\* AIR fixtures with embedded smart sensor
- 2. Install the wireless battery-powered wall switch
- 3. With CLAIRITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome





r Light AIR (PODB 2P DX

Submitted By S L BAGBY CO Catalog Number LDN4 30/10 LO4AR LSS MVOLT GZ10 EL

Notes



### **FEATURES & SPECIFICATIONS**

INTENDED USE - Typical applications include corridors, lobbies, conference rooms and private offices.CONSTRUCTION — Galvanized steel mounting/plaster frame; galvanized steel junction box with bottom-hinged access covers and spring latches. Reflectors are retained by torsion springs.

Vertically adjustable mounting brackets with commercial bar hangers provide 3-3/4" total adjustment. Two combination 1/2"-3/4" and four 1/2" knockouts for straight-through conduit runs. Capacity: 8 (4 in, 4 out). No. 12 AWG conductors, rated for 90°C.

Accommodates 12"-24" Joist spacing.

Passive cooling thermal management for 25°C standard; high ambient (40°C) option available. Light engine and drivers are accessible from above or below ceiling.

Max ceiling thickness 1-1/2".

OPTICS — LEDs are binned to a 3-step SDCM; 80 CRI minimum. 90 CRI optional.

LED light source concealed with diffusing optical lens.

General Illumination lighting with 1.0 S/MH and 55° cutoff to source and source image.

Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and black painted reflectors.

ELECTRICAL — Multi-volt (120-277V, 50/60Hz) 0-10V dimming drivers mounted to junction box, 10% or 1% minimum dimming level available.

0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled.

70% lumen maintenance at 60,000 hours.

LISTINGS — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IP55 rated, ENERGY STAR® certified product.

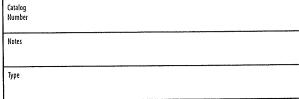
WARRANTY - 5-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.





# LDN4

4" Open and WallWash LED Non-IC **New Construction Downlight** 



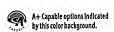












ORDERING INFORM	MATION Lead times w	TION Lead times will vary depending on options selected. Consult with your sales representative.				Example: LDN43	35/15 LO4AR LSS MVOLT E	
LDN4 Series	Color temperature	Lumens <sup>1</sup>	Tecano	Aperture/Trim Colo	ľ	Finish	Voltage	
LDN4 4" round	27/ 2700K 30/ 3000K 35/ 3500K 40/ 4000K 50/ 5000K	05 500 lumens 07 750 lumens 10 1000 lumens 15 1500 lumens	20 2000 lumens 25 2500 lumens 30 3000 lumens 40 4000 lumens	LO4 Downlight LW4 Wallwash	AR Clear WR <sup>2</sup> White BR <sup>2</sup> Black	LSS Semi-specular LD Matte diffuse LS Specular	MVOLT Multi-volt 120 120V 277 277V 347³ 347V	

Driver	Options			
G210	TRW* W TRBL* BI  ELS* Er Pr ELSD* Er Pr ELSDS* Er Pr ELSDS* Er Pr E10WCPP* Er NPP16DZ*** In NPP16DER*** In NP16DER*** In NPP16DER*** In NP16DER*** In NP16DER*** In NP16DER*** In NP16DER*	ingle fuse White painted flange lack painted flange mergency battery pack with integral test switch. 10W Constant ower, Not Certified in CA Title 20 MAEDBS mergency battery pack with remote test switch. 10W Constant ower, Not Certified in CA Title 20 MAEDBS mergency battery pack with self-diagnostics, 10W Constant ower, Integral test switch. Not Certified in CA Title 20 MAEDBS mergency battery pack with self-diagnostics, 10W Constant ower, remote test switch. Not Certified in CA Title 20 MAEDBS mergency battery pack, 10W Constant Power with integral test witch. Certified in CA Title 20 MAEDBS mergency battery pack, 10W Constant Power with remote test witch. Certified in CA Title 20 MAEDBS Light® network power/relay pack with 0-10V dimming for on-eldoLED drivers (GZ10, GZ1). Light® network power/relay pack with 0-10V dimming for on-eldoLED drivers (GZ10, GZ1). Etght® network power/relay pack with 0-10V dimming for on-eldoLED drivers (GZ10, GZ1).	N80° JOTI NPSBOEZANO NPSBOEZERANO HAO'I CPI2 RRL  NLTAIR2* NLTAIRER2* NLTAIRER2* NLTAIRER2* USPOM 90CRI	nLight* Lumen Compensation Wireless room control with "Just One Touch" pairing Mireless room control with "Just One Touch" pairing Milght* dimming pack controls 0-10V eldoLED drivers (EZ10, EZ1), R. Controls fixtures on emergency drout. High ambient option (40°C) Chicago Plenum RELOC*-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to RRI for complete nomenclature. Available only in RRLA, RRLB, RRLAE, and RRLC12S. Light* Air enabled nLight* Air Dimming Pack Wireless Controls. Controls fixtures on emergency circuit, not available with battery pack options nLight* Air Dimming Pack Wireless Controls. UL924 Emergency Operation, via power interrupt detection. Available with bat- tery pack options. US point of manufacture High CRI (90+)

### Notes

- Overall height varies based on lumen package; refer to dimensional
- chart on page 3. Not available with finishes.
- Not available with emergency options.
- Must specify voltage 120V or 277V.
- 12.5" of plenum depth or top access required for battery pack
- Available with clear (AR) reflector only.

- Specify voltage. ER for use with generator supply EM power. Will require an emergency hot feed and normal hot feed
- Fixture begins at 80% light level. Must be specified with NPS80EZ or NPS80EZ ER. Only available with EZ10 and EZ1 drivers.
  Not available with CP, NPS80EZ, NPS80EZER, NPP16D, NPP16DER or
- N80 options.
- 10 NLTAIR2, NLTAIRER2 and NLTAIREM2 not recommended for metal ceiling installations.
- 11 Fixture height is 5-11/16" for all lumen packages with HAO.
- Must specify voltage for 3000lm. Not available with emergency battery pack option.
- Must specify D10 or D1 driver. Not available with nLight options. Not available with CP. Not recommended for metal ceiling installation Not for use with emergency backup power systems other than battery packs.



Submitted By S L BAGBY CO Catalog Number

LDN4 30/10 LO4AR LSS MVOLT GZ10 EL

Notes

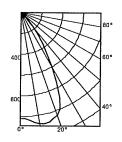
E1

### LDN4

### **PHOTOMETRY**

Distribution Curve	Distribution Data	Output Data	Coefficient of Utilization	Illuminance Data at 30" Above Floor for
		outputbutu	Coefficient of Othization	mammance bara at 20. Above Lloot lot
				a Single Luminaire

**LDN4 35/10 LO4AR**, input watts: 10.58, delivered lumens: 1085.2, LM/W = 102.57, spacing criterion at 0 = 1.04, test no. ISF 30712P229.

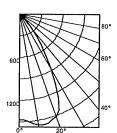


						pc		80%			10%			50%	
	Ave	Lumens	Zone	Lumens	% Lamp	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	1017		0°-30°	799.7	73.7	0	119	119	119	116	116	116		111	
5	1039	101	0°- 40°	1031,5	95.1	1	111	108	106	109	107	105	105	103	101
15	1084	304	0°-60°	1084.7	100.0	2	103	99	96	102	98	95	98		93
25	895	395	0°-90°	1085,2	100.0	3	96	92	88	95	91	87	92	89	86
35	369	232	90°-120°	0.0	0,0	4	90	85	81	89	84	80	87	83	79
45	52	51	90°-130°	0.0	0,0	5	85	79	76	84	78	74	82		74
55	1	2	90°-150°	0.0	0,0	6	79	73	69	79	73	69	77		68
65	- 1	1	90°-180°	0.0	0.0	7	75	69	64	74	68	64	73	68	64
75	0	0	0°-180°	1085,2	100,0	8	70	64	60	70	64	60	69	63	60
85	0	0	•1	Efficiency		9	66	60	56	66	60	56	65	60	56
90	0			•		10	63	57	53	62	57	53	61	56	53

		55.6	٥	78.0	٥
	Inital FC				
Mounting	Center				
Height	Beam	Dlameter	FC	Diameter	FC
8,0	33,6	5.8	16,8	8.9	3.4
10.0	18.1	7.9	9,0	12,2	1.8
12.0	11.3	10.0	5.6	15.4	1.1
14.0	7.7	12.1	3,8	18.6	0,8
16.0	5.6	14.2	2.8	21.9	0.6

50% beam - 10% beam -

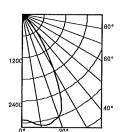
**LDN4 35/15 LO4AR**, input watts: 17.5, delivered lumens: 1570.1, LM/W = 89.72, spacing criterion at 0 = 1.04, test no. ISF 30712P234.



						pc		80%			70%			50%	
	Ave	Lumens	Zone	Lumens	% Lamp	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	1472		0°-30°	1157,1	73.7	0	119	119	119	116	116	116		111	
5	1503	146	0°-40°	1492,5	95.1	1	111	108	106			105		103	
15	1569	440	0°-60°	1569.4	100.0	2	103	99	96	102		95	98	95	93
25	1295	571	0°-90°	1570.1	100.0	3	96	92	88	95	91	87	92	89	86
35	534	335	90°-120°	0,0	0,0	4	90	85	81	89	84	80	87	83	79
45	75	74	90°-130°	0.0	0,0	5	85	79	75	84	78	74	82	77	74
55	1	3	90°-150°	0.0	0,0	6	79	73	69	79	73	69	77	72	68
65	1	1	90°-180°	0,0	0.0	7	75	69	64	74	68	64	73	66	64
75	0	0	0°-180°	1570.1	100.0	8	70	64	60	70	64	60	69	63	60
85	0	0	•	Efficiency		9	66	60	56	66	60	56	65	60	56
90	0			,		10	63	57	53	62	57	53	61	56	53
								٠,	00	U.	٥,	Ų0	U	50	55

		55.6		78.0°	
	Inital FC				
Mounting	Center				
Height	Beam	Diameter	FC	Diameter	FG
8.0	48.7	5.8	24,3	8,9	4.9
10.0	26.2	7.9	13.1	12.2	2.6
12.0	16.3	10.0	8.2	15.4	1.6
14.0	11.1	12.1	5.6	18.6	1.1
16.0	8.1	14.2	4.0	21.9	8.0

**LDN4 35/30 L04AR**, input watts: 32.1, delivered lumens: 3122.6, LM/W = 88.52, spacing criterion at 0 = 1.04, test no. ISF 30712P249.



						pc		80%			70%			50%	
	Ave	Lumens	Zone	Lumens	% Lamp	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	2927		0°-30°	2301.2	73.7	0	119	119	119	116	116	116		111	
5	2989	290	0°-40°	2968,2	95,1	1	111	108	106	109	107	105		103	
15	3120	875	0°-60°	3121.1	100.0	2	103	99	96	102	98	95	98	95	93
25	2575	1136	0°-90°	3122.6	100.0	3	96	92	88	95	91	87	92	89	86
35	1062	667	90°-120°	0,0	0.0	4	90	85	81	89	84	80	87	83	79
45	149	148	90°-130°	0.0	0.0	5	85	79	75	84	78	74	82	77	74
55	3	5	90°-150°	0.0	0.0	6	79	73	69	79	73	69	77	72	68
65	2	1	90*- 180*	0.0	0.0	7	76	69	64	74	68	64	73	68	64
75	0	0	0°-180°	3122.6	100.0	8	70	64	60	70	64	60	69	63	60
85	0	0	•	Efficlency		9	66	60	56	66	60	56	65	60	56
90	0					10	63	57	53	62	57	53	61	56	53

		50% be 55.6		10% be 78.0	
	Inital FC				
Mounting	Center				
Height	Beam	Diameter	FC	Diameter	FC
9,0	96,8	5.8	48,4	8,9	9.7
10.0	52.0	7.9	26.0	12.2	5.2
12.0	32.4	10.0	16.2	15.4	3.2
14.0	22.1	12.1	11.1	18.6	2.2
16.0	16.1	14.2	8.0	21.0	1.8

Notes

Catalog Number

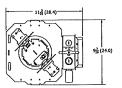
S L BAGBY CO

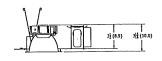
### LDN4

 $\mbox{\ensuremath{^{\bullet}}}\xspace$  All dimensions are inches (centimeters) unless otherwise noted.

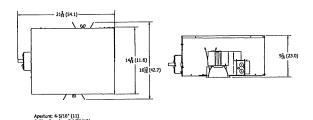
### LDN4 500 - 2000 LUMENS

Submitted By



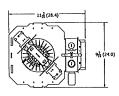


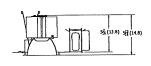
LDN4 CP



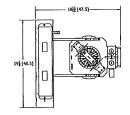
### LDN4 2500 - 4000 LUMENS

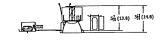
LDN4 30/10 LO4AR LSS MVOLT GZ10 EL





### LDN4 EL





LDN4				
Nominal	Lumens	Wattage	Lm/W	
500	523.6	5.74	91.2	
750	751.1	8.6	87.3	
1000	1045	10.58	98.8	
1500	1512	17.5	86.4	
2000	2006	22.12	90.7	
2500	2500 2551		97.7	
3000	3007	32.1	93.7	
4000	4212	43	98.0	

80CRI	0.950	0.966	1.000	1.025	1.101
LUMEN O	TPUTMULT 2700K	PHERS-COT 3000K	3500K	4000K	5000K

### HOW TO ESTIMATE DELIVERED LUMENS IN EMERGENCY MODE

Use the formula below to estimate the delivered lumens in emergency mode

### Delivered Lumens = 1.25 x P x LPW

P = Ouput power of emergency driver. P = 10W for PS1055CP

LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

The LPW rating is also available at Designlight Consortium.

LUMEN OUTPUT MULTIPLIERS - FINISH							
	Clear (AR)	White (WR)	Black (BR)				
Specular (LS)	1.0	N/A	N/A				
Semi-specular (LSS)	0.950	N/A	N/A				
Matte diffuse (LD)	0.85	N/A	N/A				
Painted	N/A	0.87	0.73				

### Notes

- Tested in accordance with IESNA LM-79-08.
- Tested to current IES and NEMA standards under stabilized laboratory conditions.
- · CRI: 80 typical.



Submitted By S L BAGBY CO Catalog Number

LDN4 30/10 LO4AR LSS MVOLT GZ10 EL

Notes

### LDN4

### **ADDITIONAL DATA**



The Sensor Switch JOT enabled solution offers a wireless, app-free approach to single room lighting control, JOT enabled products use Bluetooth® Low Energy (BLE) technology to enable wireless dimming and switching.

### Diagram









- 1. Power: Install JOT enabled fixtures and controls as instructed.
- Pair: Insert the pairing tool into the pinhole on the wall switch; press and hold any button for 6 seconds.
   Play: Once paired, each fixture will individually dim down to 10% brightness. All products will be fully functional.

LDN4 Series



Sensor Switch WSXA JOT

COMPA	COMPATIBLE 0-10V WALL-MOUNT DIMMERS					
MANUFACTURER	PART NO.	POWER BOOSTER AVAILABLE				
	Diva* DVTV					
Lutron*	Diva® DVSCTV					
Lution	Nova T® NTFTV					
	Nova* NFTV					
	AWSMT-7DW	CN100				
	AWSMG-7DW	PE300				
Leviton®	AMRMG-7DW					
	Leviton Centura Fluorescent Control System	1				
	IllumaTech® IP7 Series	1				
	ISD BC					
Synergy*	SLD LPCS	RDMFC				
	Digital Equinox (DEQ BC)					
Douglas Lighting Controls	WPC-5721					
	Tap Glide TG600FAM120 (120V)					
Entertainment Technology	Tap Glide Heatsink TGH1500FAM120 (120V)	1				
	Oasis OA2000FAMU					
Honeywell	EL7315A1019	EL7305A1010				
noneywen	EL7315A1009	(optional)				
	Preset slide: PS-010-IV and PS-010-WH					
	Preset slide: PS-010-3W-IV and PS-010-3W-WH					
	Preset slide, controls FD-010: PS-IFG-010-IV and					
HUNT Dimming	PS-IFC-010-WH-120/277V					
	Preset slide, controls FD-010: PS-IFC-010-3W-IV	1				
	and PS-IFC-010-3W-WH-120/277V					
11119	Remote mounted unit: FD-010	ļ				
Lehigh Electronic Products	Solitaire	PBX				
PDM Electrical Products	WPC-5721					
Starfield Controls	TR61 with DALI Interface port	RT03 DALInet Router				
WattStopper*	LS-4 used with LCD-101 and LCD-103					

### **4** Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight\* control networks when ordered with drivers marked by a shaded background\*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background\*

To learn more about A+, visit www.acuitybrands.com/aplus.

\*See ordering tree for details

Submitted By S L BAGBY CO Catalog Number LDN4 30/10 LO4AR LSS MVOLT GZ10 EL

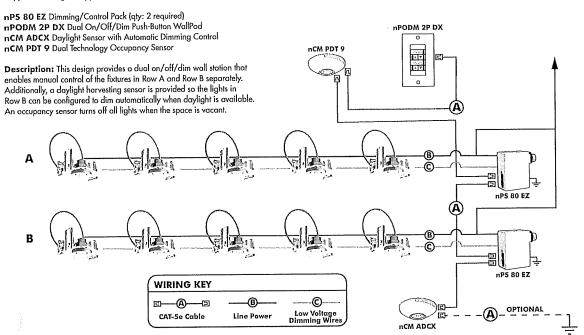
Notes

### LDN4

### EXAMPLE

Group Fixture Control\*

\*Application diagram opplies for fixtures with eldoLED drivers only.



### **Choose Wall Controls**

nLight offers multiple styles of wall controls - each with varying features and user experience.





Push-Button Wallpod Traditional tactile buttons and LED user feedback

Graphic Wallpod Full color touch screen provides a sophisticated look and feel

	nLight® Wired Controls Accessories:							
Order as separate catalog number. Visit <u>www.acuitybrands.com/products/controls/nlight</u> for complete listing of nLight controls.								
WallPod Stations	Model number	Occupancy sensors	Model Number					
On/Off	nPODM (Color)	Small motion 360°, ceiling (PIR/dual Tech)	nCM 9 / nCM PDT 9					
On/Off & Raise/Lower	nPOD DX (Color)	Large motion 360°, ceiling (PIR/dual tech)	nCM 10/nCM PDT 10					
Graphic Touchscreen	nPOD GFX (Color)	Wide View (PIR/dual tech)	nWV 16 / nWV PDT 16					
Photocell controls	Model Number	Wall Switch w/ Raise/Lower (PIR/dual tech)	nWSX LV DX / nWSX PDT LV DX					
Dimming	nCM ADCX	Cat-5 cables (plenum rated)	Model Number					
		10', CATS 10FT	CATS 10FT JI					
		15, CATS 15FT	CATS 15FT J1					

### nLight® AIR Control Accessories:

Order as separate catalog number. Visit www.acultybrands.com/products/controls/nlightair.

Model number Wall switches On/Off single pole rPODB [color] rPODB 2P [color] On/Off two pole rPODB DX [color] On/Off & raise/lower single pole On/Off & raise/lower two pole rPODB 2P DX [color] On/Off & raise/lower single pole rPODBZ DX WH1

Can only be ordered with the RES7Z zone control sensor version.

### nLight AIR

nLight AIR is the Ideal solution for retrofit or new construction spaces where adding communication is cost prohibitive. The integrated nLight AIR rP2D Power Pack is part of each Lithonia LDN Luminaire. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.







Simple as 1.2.3

- Install the nLight\* AIR fixtures with embedded smart sensor
- 2. Install the wireless battery-powered wall switch
- 3. With CLAIRITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome





LDN4



Submitted By S L BAGBY CO

Catalog Number C 2 32 MVOLT GEB10IS

Notes



### **FEATURES & SPECIFICATIONS**

INTENDED USE — Ideal where high brightness and good illumination levels are required such as retail, light industrial and warehouses. Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate. Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.

Attributes: Available in one lamp or two lamp configuration.

Sturdy channel cover secured by captive quarter-turn latch for easy access to wireway.

Combination endplate/channel connector furnished with each fixture.

 $Finish: Five-stage\ iron\ phosphate\ pretreatment\ ensures\ superior\ paint\ adhesion\ and\ rust\ resistance.\ Painted$ parts finished with high-gloss, baked white enamel.

**ELECTRICAL** — Thermally protected, resetting, Class P, UL Listed and CSA Certified ballast is standard. Sound rating depends on lamp/ballast combination.

AWM, TFN, THHN wire throughout, rated for required temperatures.

INSTALLATION — For unit or row installations, surface or suspended mounting.

LISTINGS — UL listed to US and Canadian safety standards for use with fluorescent lamps. Optional: Mexico NOM.

Damp location listed.

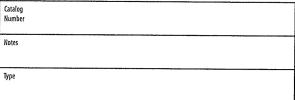
Listed for 25 degree Cambient temperature.

WARRANTY — 1-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

Specifications subject to change without notice.



**General-Purpose Strip** 







2', 3', 4', 6' and 8' length 1 or 2 lamps

Sp	Specifications						
Length:	24" (61.0) 36" (91.4) 48" (121.9) 72" (182.9) 96" (243.8)						
Width: Fixture	4-3/8" (11.1)						

Depth: 2-1/16" (5.2)

All dimensions are inches (centimeters) unless otherwise specified.

ORDERINGINFORMATION	Lead times v	vill vary depending on options selected. Con	esentative.	Example: C 2 32 MVOLT GEB101	
С					
Series	Number of lamps	Lamp type	Voltage	Options	
C General-purpose strip For tandem double length unit, add prefix T. Example: TC	1 Z lamp not Included	18	MVOLT¹ 120 277 347 Others available	GEB10IS GEB10RS GEB10PS 1/4 PLR_ CSA NOM	Electronic ballasts, <10%THD, instant start  Electronic ballast, <10%THD, rapid start <sup>2</sup> Electronic ballast, <10%THD, programmed start  One four-lamp ballast <sup>3</sup> Plug-in wiring; specify 1, 2, or 3 branch circuits and hot wires (A = Black, B = Red, C = Blue, AB or AC) <sup>4</sup> CSA Certified (only required for 347V)  NOM Certified

Accessories:	Order as separate catalog number.
SQ_	Swivel stem hanger (specify length in 2" increments)
1B	Ceiling spacer (adjusts from 1-1/2" to 2-1/2" from ceiling)
CONLGC	12" screw-on channel connector
WGCUN NST	Wireguard, 4' white <sup>3</sup>
HC36	Chain hangers (1 pair, 36" long)
HRC*	Hooker T-bar hanger (flush to ceiling)
HRC1°	Hooker T-bar hanger (1-1/2" from ceiling)
WGCSMR	Wireguard, 4' white for symmetric reflectors
WGCASR	Wireguard, 4' white for asymmetric reflector <sup>5</sup>
CSMR48	Symmetric reflector, 4' white, 7" aperture <sup>5</sup>
CASR48	Asymmetric reflector, 4' white, 5-3/4" wide5

- MVOLT standard for 120-277V applications, 50-60 mhz operation. Some options require voltage specified.
- 347V, simline lamps only.
- Not available in slimline.
- Specify voltage.
- Order two for 8' fixtures.



Project 21-55978-0

Marvin Village Hall - New Construction

Submitted By S L BAGBY CO

Catalog Number C 2 32 MVOLT GEB10IS

Notes

### **C** General-Purpose Strip

Catalog Number	UPC	Description	# of Lamps	Length	Wattage	Voltage	Ballast Type	Lamp Included	Pallet Qty.	Standard Carton Qty.
C232 MV	745975079711	T8 general-purpose strip	2	48"	32W	120-277V	Electronic, instant start	N N	99	1
TC232 MV	745975080809	T8 general-purpose strip	4	96"	32W	120-277V	Electronic, instant start	N	99	11
C225 MV	745975081219	T8 general-purpose strip	2	36"	25W	120-277V	Electronic, instant start	N	99	11
C217 MV	745975081493	T8 general-purpose strip	2	24"	17W	120-277V	Electronic, instant start	N	198	1
C296	745973789766	T12 general-purpose strip	2	96"	75W	120V	Electronic, rapid start	N	99	1
C296T8 MV	745977076145	T8 general-purpose strip	2	96"	75W	120-277V	Electronic, Instant start	N	99	11

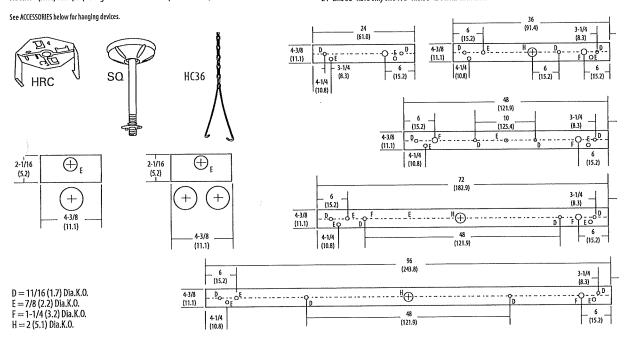
MOUNTING DATA
For unit or row installation, surface or suspended mounting.
Unit installation — Minimum of two hangers required.

Row installation — Two hangers per channel required one per fixture plus one per row of CONLGC installed. Hooker® (HRC) and (HC) Hangers - minimum two per channel (unit and row).

### **DIMENSIONS**

All dimensions in inches (centimeters) unless otherwise specified. Subject to change without notice.

48", 72", and 96" have only two 7/8" K.O.'s  $6^{\rm H}$  from each end. 24" and 36" have only two 7/8" K.O.'s 3-1/4 from each end.



### **PHOTOMETRICS**

See  $\underline{www.lithon!a.com} \ for \ photometry \ reports.$ 



Submitted By S L BAGBY CO Catalog Number WPX2 LED 40K MVOLT DDBXD



### WPX LED Wall Packs



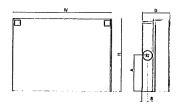








### **Specifications**



Front View

Side View

Junicipatio	titeliolas(t0)	Width (W)	Dards(D)	Side Condu	il deratton	Melietro
13500000000	-magnami	(Methilical)	edan(a)	A)	0	Weight
WPX1	8.1" (20.6 cm)	11.1"(28.3 cm)	3.2"(8.1 cm)	4.0"(10.3 cm)	0.6"(1.6 cm)	6.1 lbs (2.8kg)
WPX2	9.1"(23.1 cm)	12.3"(31.1 cm)	4.1"(10.5 cm)	4.5" (11.5 cm)	0.7" (1.7 cm)	8.2 lbs (3.7kg)
WPX3	9.5"(24.1 cm)	13.0" (33.0 cm)	5.5" (13.7 cm)	4.7" (12.0 cm)	0.7"(1.7 cm)	11.0 lbs (5.0kg)

Catalog Number					
Hotes					
Туре				 	
Hit the Tab Lev	o mouse over the	page to see all ma	eracuse elements.	 -	

### Introduction

The WPX LED wall packs are energy-efficient, costeffective, and aesthetically appealing solutions for both HID wall pack replacement and new construction opportunities. Available in three sizes, the WPX family delivers 1,550 to 9,200 lumens with a wide, uniform distribution.

The WPX full cut-off solutions fully cover the footprint of the HID glass wall packs that they replace, providing a neat installation and an upgraded appearance. Reliable IP66 construction and excellent LED lumen maintenance ensure a long service life. Photocellend emergency egress battery options make WPX ideal for every wall mounted lighting application

### Ordering Information

### **EXAMPLE: WPX2 LED 40K MVOLT DDBXD**

Series	ColorTemperature	Voltage	Options	Finish
WPX1 LED P1         1,550 Lumens, 11W¹           WPX1 LED P2         2,900 Lumens, 24W           WPX2 LED         6,000 Lumens, 47W           WPX3 LED         9,200 Lumens, 69W	30K 3000K 40K 4000K 50K 5000K	MVOLT 120V - 277V 347 347V <sup>3</sup>	(blank) None  E4WH Emergency battery backup, CEC compliant (4W, 0°C min) <sup>2</sup> E14WC Emergency battery backup, CEC compliant (14W, -20°C min) <sup>2</sup> PE Photocell <sup>3</sup>	DDBXD Dark bronze DWHXD White DBLXO Black Note: For other options, consult factory.

Note: The lumen output and input power shown in the ordering tree are average representations of all configuration options. Specific values are available on request.

- All WPX wall packs come with 6kV surge protection standard, except WPX1 LED P1 package which comes with 2.5kV surge protection standard. Add SPD6KV option to get WPX1 LED P1 with 6kV surge protection.

  Sample nomenclature: WPX1 LED P1 40K MVOLT SPD6KV DDBXD

  All MPX2 and MPX2 and MPX2 and MPX2.
- Battery pack options only available on WPX1 and WPX2.
   Battery pack options not available with 347V and PE options.

### **FEATURES & SPECIFICATIONS**

The WPX LED wall packs are designed to provide a cost-effective, energy-efficient solution for the one-for-one replacement of existing HID wall packs. The WPX1, WPX2 and WPX3 are ideal for replacing up to 150W, 250W, and 400W HID luminaires respectively. WPX luminaires deliver a conference of the state of the state

### CONSTRUCTION

WPX feature a die-cast aluminum main body with optimal thermal management that both enhances LED efficacy and extends component life. The luminaires are IP66 rated, and sealed against moisture or environmental contaminants.

Light engine(s) configurations consist of high-efficacy LEDs and LED lumen maintenance of L90/100,000 hours. Color temperature (CCT) options of 3000K, 4000K and 5000K with minimum CRI of 70. Electronic drivers ensure system power factor >90% and THD <20%. All luminaires have 6kV surge protection (Note: WPX1 LED P1 package comes with a standard surge protection rating of 2.5kV. It can be ordered with an optional 6kV surge protection).

All photocell (PE) operate on MVOLT (120V - 277V) input.

Note: The standard WPX LED wall pack luminaires come with field-adjustable drive current feature. This feature allows tuning the output current of the LED drivers to adjust the lumen output (to dim the luminaire).

WPX can be mounted directly over a standard electrical junction box. Three 1/2 inch conduit ports on three sides allow for surface conduit wiring. A port on the back surface allows poke-through conduit wiring on surfaces that don't have an electrical junction box. Wiring can be made in the integral wiring compartment in all cases. WPX is only recommended for installations with LEDs facing downwards.

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. IP66 Rated. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at <a href="https://www.designlights.org/QPL">www.designlights.org/QPL</a>, to confirm which versions are qualified. International Dark Sky Association (IDA) Fixture Seal of Approval (ISAN) association (IDA) Fixture Seal of Approval (IDA) Fixture Seal of Approval (ISAN) association (IDA) Fixture Seal of Approval (IDA) association (IDA) Fixture Seal of Approval (IDA) association (IDA) Fixture Seal of Approval (IDA) association (FSA) is available for all products on this page utilizing 3000K color temperature only.

5-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/CustomerResources/Terms and conditions.asox.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.





Submitted By S L BAGBY CO Catalog Number
WPX2 LED 40K MVOLT DDBXD

Notes

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### Performance Data

### **Electrical Load**

luminalie	ImputiPower(W)	1/201/	2037	240W	24/11/1	3/44/1/
WPX1 LED P1	11W	0.09	0.05	0.05	0.04	0.03
WPX1 LED P2	24W	0.20	0.12	0.10	0.09	0.07
WPX2	47W	0.39	0.23	0.20	0.17	0.14
WPX3	69W	0.58	0.33	0.29	0.25	0.20

### Projected LED Lumen Maintenance

Data references the extrapolated performance projections in a 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.94	>0.92	>0.90

### **HID Replacement Guide**

	Luminaire	Equivalent HID Lamp	WPX Input Power
-	WPX1 LED P1	100W	11W
Г	WPX1 LED P2	150W	24W
	WPX2	250W	47W
	WPX3	400W	69W

### Lumen Output

Commaire	Color Temperature	lumen Output
•	3000K	1,537
WPX1 LED P1	4000K	1,568
	5000K	1,602
WPX1 LED P2	3000K	2,748
	4000K	2,912
	5000K	2,954
	3000K	5,719
WPX2	4000K	5,896
	5000K	6,201
	3000K	8,984
WPX3	4000K	9,269
	5000K	9,393

# Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

emperatures from 0-30 C (32-122 1).					
Ambitenti	Amblent	Lumen Multiplier			
0°C	32°F	1.05			
5℃	41°F	1.04			
10℃	50°F	1.03			
15°C	59°F	1.02			
20°C	68°F	1.01			
25°C	77°F	1.00			
30°C	86°F	0.99			
35°C	95°F	0.98			
40°C	104°F	0.97			

### **Emergency Egress Battery Packs**

The emergency battery backup is integral to the luminaire — no external housing or back box is required. The emergency battery will power the luminaire for a minimum duration of 90 minutes and deliver minimum initial output of 550 lumens. Both battery pack options are CEC compliant.

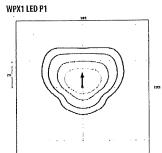
Battery Type	Minimum Temperature Rating	Power (Watts)	Controls Option	Ordering Example
Standard	0°€	4W	E4WH	WPX2 LED 40K MVOLT <b>E4WH</b> DDBXD
Cold Weather	-20°C	14W	E14WC	WPX2 LED 40K MVOLT <b>E14WC</b> DDBXD

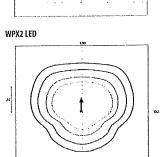
### Photometric Diagrams

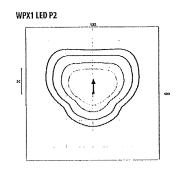
To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WPX LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards

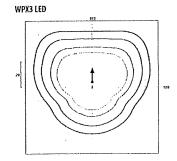


1.0 fc









Mounting Height = 12 Feet.



Submitted By S L BAGBY CO

Catalog Number LHQM LED R HO M6

Notes

EXEM HO



### **FEATURES & SPECIFICATIONS**

INTENDED USE — Suitable for applications requiring both exit sign and unit equipment. Attractive, 8" tall, streamlined design is great for above-the-door applications and other tight fits. Optional high-output version with remote lamps are ideal for emergency egress lighting. Certain airborne contaminants can diminish integrity of acrylic and/or polycarbonate. Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.

CONSTRUCTION - Engineering-grade thermoplastic housing is impact-resistant, scratch-resistant andcorrosion-proof. UL94V-O flame rating. UV-stable resin resists discoloration from natural and man-made light sources.

Rugged unibody housing snaps together with no additional fasteners. Faceplate and back cover are interchangeable on housing. Positive snap-fit tabs hold faceplate securely, yet are easily removable for lamp compartment access. Universal, directional chevron inserts are easily removed and reinserted.

Uniform graphics illumination without shadows or hot spots. Letters are 6" high with 3/4" stroke, with 100 ft. viewing distance rating based upon UL924 standard.

LEDs mounted on primary circuit boards for sign illumination. Low-energy LED lamp in sign operates in normal (AC input) and emergency (DC input) modes.

Low-profile, integrated test switch/pilot light. Easily viewed bright red status indicator.

Unique track-and-swivel arrangement permits full range of direction of lamp head adjustment. Universal J-box mounting pattern. Tool-less access for maintenance. Conduit entry position on top of unit.

U.S. Patent No. 6,848,798; 6,499,866; 6,142,648; 5,797,673; D379,373; 5,526,251; D484,272; D473,672; 5,611,163; 5,646,502.

OPTICS — Twin LED lamp heads operate in emergency (DC input) mode with 12 series-parallel white LEDs in each head. Provides redundant light sources to ensure emergency lighting performance. The typical life of the exit LED lamp is 10 years.

ELECTRICAL — Dual-voltage input capability (120/277V). Edge connector on printed circuit board ensures long-term durability.

Current-limiting charger maximizes battery life and minimizes energy consumption. Provides low operating

Short-circuit protection — current-limiting charger circuitry protects printed circuit board from shorts. Thermal compensation adjusts charger output to provide optimum charge voltage relative to ambient

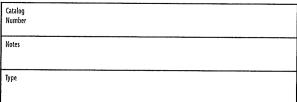
Regulated charge voltage maintains constant-charge voltage over a wide range of line voltages. Prevents over/ undercharging that shortens battery life and reduces capacity.

Filtered charger input minimizes charge voltage ripple and extends battery life.

AC/LVD reset allows battery connection before AC power is applied and prevents battery damage from deep discharge.

Single multi-color LED indicator to display two-state charging, test activation and three-state diagnostic test. Test switch provides manual activation of 30-second diagnostic testing for on-demand visual inspection. Self-diagnostic testing for 30 seconds every 30 days, 30 minutes at 180-day interval, and 90 minutes annually. Diagnostic evaluation of LED light source, AC-to-DC transfer, charging and battery condition.









# LHQM LED

LED Lamp Head Nickel-Cadmium Battery

HO RO







Battery: Sealed, maintenance-free nickel-cadmium battery delivers 90-minute capacity to emergency lamps. Two-state contstant-current charge maximizes battery life and automatically recharges after battery discharge. Low-voltage disconnect prevents excessively deep discharge that can permanently damage the battery. Optional high-output battery to power both local and optional LED remote lamp heads simultaneously. INSTALLATION — Universal mounting canopy for top or end mount. Back mount standard for single face only. Housing snaps to canopy with positive-locking tabs. Cam locking pin secures housing to canopy.

Easily removed mounting knockouts. Conduit entry knockout for 1/2" flexible conduit. J-box pattern on back panel. LISTINGS — UL damp location listed standard 50°-104°F (10°-40°C). Meets UL 924, NFPA 101 (current Life Safety Code), NEC and OSHA illumination standards. Meets all applicable FCC Title 47, Part 15, Subpart B requirements.

WARRANTY --- 5-year limited warranty. (Battery is prorated). Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

† Exit Signs Certified in the CA Title 20 Appliance Efficiency Database.

### ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative Example: LHQM LED G

IHQM Family	LED Lamp type	Housing color	Letter color	Options
LHQM Stencil face, single face plate with extra face plate	LED Two 1.5W/9.6V white LED	(blank) White B Black	R Red G Green	HO High-output Ni-cad battery NOM Meets Mexican standards¹ HO RO High-output option, less lamp heads SD Self-diagnostics NOM SALIDA Salida signage (non-UL)²

### Accessories: Order as separate catalog number.

Single, LED indoor remote head, white, self-diagnostics 3.4.5 FLAT 0 1 0309 SD Twin, LED indoor remote head, white, self-diagnostics 3,4,5 Single, LED weather-proof remote head, gray, ELA QWP L0309 SD self-diagnostics 3,4,5 ELAT QWP L0309 SD Twin, LED weather-proof remote head, gray, self-diagnostics 3.4.5 Single, LED indoor remote head, white 4.5 **ELA Q L0309** 

Twin, LED indoor remote head, white 4,5

Single, LED weather-proof remote head, gray4.5

Twin, LED weather-proof remote head, gray<sup>4,5</sup>

ELA LOMUS12 ERE W SGL SQ M12 EREWTSQM12

ELA WG3

ERE GY SGL WP SQ M12 ERE GY T WP SQ M12

12" white stem kit7 Single, LED indoor remote head, square, ivory white, .75W, 3.6V-12V voltage sensing Twin, LED indoor remote head, square, ivory white, 1.5W, 3.6V-12V voltage sensing<sup>8</sup> Single, LED weather-proof remote head, square, gray, 1W, 3.6V-12V voltage sensing<sup>8,9</sup>

Wireguard, 30"W x 13-1/2"H x 6"D6

Twin, LED weather-proof remote head, square gray, 2W, 3.6V-12V voltage sensing<sup>8,9</sup>

- Available in black or white. Consult factory for options.
- Only available in white. NOM standard. Only compatible with self-diagnostic option. (ex: HO SD)
- Also available in black. Add "B" after ELA to order black finish. Example: ELA B Q L0309. Only compatible with HO option . See spec
- sheet <u>ELA-O-LED</u>. See spec sheet ELA-WG
- See spec sheet ELA-Stemkits.
- See spec sheet <u>ERE</u>. Not available with SD. Only compatible with

ELA T O L0309

ELA OWP L0309

ELAT QWP L0309

Submitted By S L BAGBY CO Catalog Number LHQM LED R HO M6

Notes

EXEM HO

### LHQM LED QUANTUM® Exit/Unit Combo

### **SPECIFICATIONS**

Electrical Primary Circuit				
Tagerer F	Typical LED life <sup>1</sup>	Supply voltage	Max amps	Max watts
	1	120	.05	4.3
Red and green LED	10 years	277	,03	4.3

### **BATTERY**

Ni-Cad				
Voltage	Typical Shelf life <sup>2</sup>	Typical life²	Maintenance <sup>3</sup>	Temperature range <sup>4</sup>
9.6	3 years	7-9 years	none	50-104°F (10-40°C)

- Based on continuous operation.
- 2 At 77°F (25°C).
- 3 All life safety equipment, including emergency lighting path of egress, must be maintained, serviced and tested in accordance with all National Fire Protection Association and local codes. Failure to perform the required maintenance, service or testing could jeopardize the safety of occupants and will void all warranties.
- 4 Optimum ambient temperature range where unit will provide capacity for 90 minutes. Higher and lower temperatures affect life and capacity.
- Battery life is negatively impacted by many variables including temperature, charging rates, number of cycles and deep discharges due to long periods of time without AC power.

Remote Output Ca	pacity		
Standard unit	Combo	Combo/high-output battery(HO)	Combo/high-output (HO) and no heads (RO)
NA	NA	3W	6W

# MOUNTING All dimensions are inches (centimeters). Shipping weight: 3.6 lbs. (1.6 kgs.). Face 19-1/4 (48.9) 12 (30.5) Test switch/ pilot light Top End 1/2" flexible conduit entry knockout 1/2" flexible conduit entry knockout

(20.3)

(10.2)

### LAMP PHOTOMETRICS

QUANTUM LED SERIES -- SINGLE COVERAGE

3W Total White LEDs

Using a single unit at a typical 7.5' mounting height delivers an average illuminance of 1.0 FC over a distance of 24' on a 3' path of egress and 18' on a 6' path of egress.

Example of single LHQM LED exit
Illuminating a 3' path of egress

Example of multiple LHQM LED exits
Illuminating a 3' path of egress

Example of multiple LHQM LED exits
Illuminating a 3' path of egress

Illuminating a 6' path of egress

\_ 6 (15.2)

(30.5)

QUANTUM LED SERIES — MULTIPLE COVERAGE

3W Total White LEDs

Using multiple units at a typical 7.5' mounting height delivers 25' center-to-center spacing on a 3' path of egress and 20' center-to-center spacing on a 6' path of egress.

### **EXTENDED RUN-TIME FOR HIGH-OUTPUT EXITS**

 Product
 Run time

 LHQM LED H0 (no remotes)
 3.8 hours

 'M LED H0 R0 (no remotes)
 7.5 hours



LHQM-LED



Submitted By S L BAGBY CO Catalog Number ERE GY T WP RD

Note

RH



### **FEATURES & SPECIFICATIONS**

INTENDED USE — Single and twin LED remote lamps for indoor and outdoor applications, for use as part of an emergency lighting system, providing light for path of egress.

**CONSTRUCTION** — Indoor remote heads are injection-molded, engineering-grade, 5VA flame retardant, high-impact resistant, thermoplastic, ivory white or black finish.

Weather-proof (WP) are engineering grade, high-impact resistant thermoplastic, sealed and gasketed, gray or black finish. For use in damp and wet location areas.

Compatible with EU2L REM, ECC REM, EU2C HO, ELM2L LTP, ECR/ECG HO, ECRM HO, ECBRM and EXRM. Fully adjustable lamp heads.

Suitable for wall or ceiling mount. Mounts to a single-gang switch box.

OPTICS — The typical life of the LED is 10 years.

Round remotes (ERE RD) have one, 0.75W white LED per lamp head. To be powered from low-voltage power sources (3.6V only).

Weather-proof (ERE SGL SQ and ERE SGL WP SQ) have eight, 1W total, white LEDs per lamp head.

Weather-proof (ERET SQ and ERET WP SQ) have eight, 2W total, white LEDs per lamp head.

ERE SQ (single and twin) for use with 3.6V, 6V, 9.6V & 12V sensing power source.

INSTALLATION — Suitable for wall or ceiling mount. Mounts to a single-gang switch box.

Meets UL924, NFPA 101 (current Life Safety Code), NEC, OSHA, Local and State Codes.

Indoor damp location listed (ERE) 50°F to 104°F (10°C to 40°C).

Wet location listed (EREWP) -22°F to 122°F (-30°C to 50°C).

WARRANTY — 2-year limited warranty. Complete warranty terms located at: <a href="https://www.acuitybrands.com/support/warranty/terms-and-conditions">www.acuitybrands.com/support/warranty/terms-and-conditions</a>

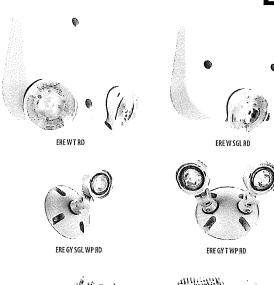
NOTE: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25  $^{\circ}$ C. Specifications subject to change without notice.

Catalog Number			
Notes		 	-
Туре	<del></del>		 

Remote Lamps

**ERE** 





ERE W SGL SQ



ERE WTSQ



ERE GY SGL WP SQ



ERE GY T WP SQ





Submitted By S L BAGBY CO Catalog Number ERE GY T WP RD

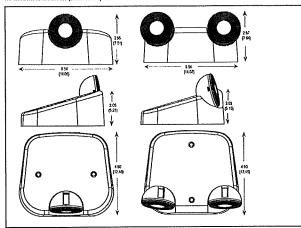
Notes

RH

### **ERE** Remote Lamps

### MOUNTING AND SPECIFICATIONS

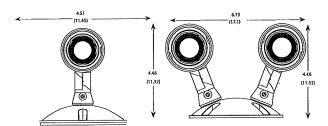
All dimensions are inches (centimeters) unless otherwise indicated.



Specifications Indoor Single Remote Round (ERE SGL RD)

Length: 5.54 (14.06) Depth: 2.05 (5.21) Height: 4.90 (12.45) Veight: .55 lbs (.25 kgs) Specifications Indoor Twin Remote Round (ERE SGL RD)

Length: 5.54 (14.06) Depth: 2.03 (5.15) Height: 4.90 (12.45) Weight: .60 lbs (.27 kgs)

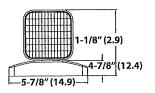


Specifications Weather Proof Single Remote Round (ERE SGL WP RD)

Length: 4.51 (11.45) Depth: 1.74 (4.42) Height: 4.46 (11.32) Weight: . 0.75 lbs (0.34 kgs) Specifications

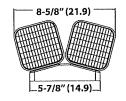
Weather Proof Twin Remote Round (ERE T WP RD)

Length: 6.73 (17.1) Depth: 1.74 (4.42) Height: 4.46 (11.32) Weight: 1.0 lbs (0.45 kgs)



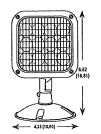
Specifications Indoor Single Remote Square (ERE SGL SQ)

Width: 5.875 (14.9)
Width (head): 8.625 (21.9)



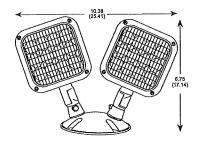
Specifications
Indoor Single Remote Twin
(ERET SQ)

Width: 5.875 (14.9) Height (head): 1.125 (2.9) Height: 4.875 (12.4)



Specifications
Weather proof Single Remote Square
(ERE SGL WP SQ)

Length: 4.25 (10.80)
Depth (head): 2.25 (5.71)
Depth (base): .87 (2.20)
Height: 6.62 (16.81)
Weight: .65 lbs. (.29 kgs)



Specifications
Weather proof Twin Remote Square
(ERE T WP SQ)

Length: 10.38 (26.37) Depth (head): 2.25 (5.71) Depth (base): .87 (2.20) Height: 6.8 (17.27) Weight: 1.3 lbs (.54 kgs)



Submitted By S L BAGBY CO Catalog Number ERE GY T WP RD

Notes

RH

## **ERE** Remote Lamps

ORDERINGINFORMATION	Example: ERE GYT WP SC			
Series  ERE LED Remote lamp	Housing Color  W Ivory white 1	Number of Lampheads  SGL Single	Lamp Head Type  SQ Square	Options (Blank) Not Required
	GY Gray <sup>2</sup> B Black	T Twin	RD Round	WP Weather Proof <sup>2</sup>

### Notes

- 1 Ivory white housing color not available with WP SQ option.
- 2 Gray only available with WP option.

COMPATIBLE PRODUCT*										
TYPE	ERE SGL RD	ERETRD	ERE SGL WP RD	ERET WP RD	ERE SGL SQ	ERETSQ	ERE SGL WP SQ	ERE T WP SQ		
EU2L REM	2	1	2	1	1	0	1	0		
EU2CHO	2	1	2	1	2	1	2	1		
ELM2L LTP	0	0	0	0	2	1	2	1		
ECC R REM ECC G REM	2	1	2	1	2	1	2	1		
ECR LED HO ECG LED HO	4	2	4	2	3	1	3	1		

<sup>\*</sup> This is in addition to the lamp heads on the product.



Submitted By S L BAGBY CO Catalog Number EXR LED M6

Notes

EX





Catalog Number		
Notes	 	
Туре	 	 

### Contractor Select™

# EXR & EXG

### LED Exits

The Lithonia Ligthing® EXG/EXR LED Exit Signs are suitable for emergency lighting applications such as stairways and hallways. This fully assembled single-face exit with extra faceplate is available in red and green letters. It's low profile makes it ideal for safely illuminated the path of egress in small spaces and can be wall or ceiling mounted. The emergency power provides 90 minutes of illumination in the event of a power loss.

### FEATURES:

- Test switch and status indicator for low maintenance (EL emergency models only)
- ULindoor damp location 50° to 104°F (10°C to 40°C) listed standard
- For use with Dual voltage 120/277VAC





		NAME OF THE PARTY		Input Wattage		Input Amps		Pallet	Carton
atalog Number UPC Description	Supply Voltage	120	277	120	2777	Qty	Qty		
EXR LED M6	784231874684	Red exit, AC only	120/277	1.0W	1.0W	0.09	0.09	360	6
EXG LED M6	784231874806	Green exit, AC only	120/277	1.0W	1.0W	0.09	0.09	360	6
EXR LED EL M6	784231874738	Red exit with backup battery	120/277	1.0W	1.0W	0.09	0.09	360	6
EXGLED EL M6	784231874851	Green exit with backup battery	120/277	1.0W	1.0W	0.09	0.09	360	6

Accessories1: Order as separate catalog number.

ELA WG1 Wireguard (back mount only, 13 3/4"H x 15 1/4"W x 6"D)

ELA WGEXT Wireguard (top mount only, 11"H x 18"W x 11"D)

ELA WGEXE Wireguard (end mount only, 11"H x 15"W x 4-3/4"D)

 $\label{eq:NOTES} \textbf{1. See spec sheet } \underbrace{\textbf{ELA-WG}}_{} \text{for more information.}$ 



Submitted By S L BAGBY CO Catalog Number EXR LED M6

Notes

EX





### Specifications

### INTENDED USE:

LED lighted exit signs for marking the means of egress in accordance with Life Safety Code NFPA 101.

### CONSTRUCTION:

Injection-molded, flame-retardant, high-impact, thermoplastic housing with snap-fit design components for easy installation. Universal J-box pattern. Universal chevrons are easily removed for directional indication.

Fully assembled single face with extra faceplate for easy field-conversion to double face. Letters 6" high with 3/4" stroke, with 100 ft viewing distance rating, based on UL924 standards.

### OPTICS:

The typical life of the LED lamp is 10 years.

### ELECTRICAL:

Dual-voltage input 120V or 277V AC. Non-emergency (AC only without battery) or Emergency exit with battery. The emergency model includes the test switch, status indicator and rechargeable battery.

Battery: (EL models) maintenance-free ni-cad battery provides 90 minutes of emergency power.

### INSTALLATION:

Top, back or end mounting capability (canopy included).

### LISTINGS:

UL Listed. Meets UL 924, NFPA 101, NFPA 70-NEC and OSHA illumination standards. Indoor damp location  $50^\circ$  to  $104^\circ$ F ( $10^\circ$ C to  $40^\circ$ C) listed standard.

### WARRANTY:

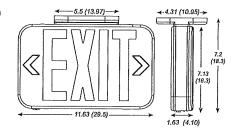
2-year limited warranty. Complete warranty terms located at: <a href="https://www.acuitybrands.com/CustomerResources/Terms">www.acuitybrands.com/CustomerResources/Terms</a> and conditions.aspx

All life safety equipment, including emergency lighting for path of egress must be maintained, serviced, and tested in accordance with all National Fire Protection Association (NFPA) and local codes. Failure to perform the required maintenance, service, or testing could jeopardize the safety of occupants and will void all warranties.

**Note**: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

### **Dimensions**

Length: 11.63 (29.5) Depth: 1.63 (4.1) Height: 7.2 (18.3) Weight: 2.1 LB



All dimensions are inches (centimeters) unless otherwise indicated.



Submitted By S L BAGBY CO Catalog Number ELM6L UVOLT LTP SDRT

Notes

EM



### FEATURES & SPECIFICATIONS

INTENDED USE — Provides a minimum of 90 minutes illumination for the rated wattage upon loss of AC power to meet and exceed code required emergency lighting, Ideal for applications requiring attractive LED unit equipment with quick installation and unparalleled performance for mounting heights from 7.5' to 30'. Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate. Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.

CONSTRUCTION — The housing is a standard white (black optional) thermoplastic with a compact and low-profile contemporary design. It is SVA flame rated, impact-resistant, scratch-resistant and corrosion proof. The UV-stable resin resists discoloration from natural and man-made light sources. There is a low-profile, integrated and back-lit test switch with an easily visible multi-color LED status indicator. The back-plate contains a universal j-box mounting pattern to facilitate ease of installation on a wide variety of j-boxes and the front housing allows tool-less access for ease of maintenance.

The lamp heads have a unique track-and-swivel arrangement permitting full range of direction of optical aiming.

 $\label{eq:optics} \textbf{OPTICS} \ -- \text{The ELM4L features two high-performance LEDs rated at 3.3 watts per lamp head and delivers a total of 640 lumens in a spot pattern (SP640L).$ 

The ELM6L features three high-performance LEDs rated at 5.3 watts per lamp head and delivers a total of 1,100 lumens in a spot pattern (SP1100L).

The typical life of an LED is 10 years. The LED light sources typically never need to be replaced under normal conditions for normal off applications.

CCT: 5000K

ELECTRICAL — Orderable in multiple voltages (see ordering tree for specific voltages.)

Current-limiting charger maximizes battery life and minimizes energy consumption to provide low operating costs. Small battery chargers Certified in the CA Title 20 Appliance Efficiency Database.

Short-circuit protection — current-limiting charger circuitry protects printed circuit board from shorts. Regulated charge voltage maintains a stable charge voltage over a wide range of line voltages.

Prevents over/undercharging that shortens battery life and reduces capacity. Filtered charger input ininimizes charge voltage ripple and extends battery life.

BATTERY: Sealed, maintenance-free nickel-cadmium (ELM4L only) or Lithium Iron Phosphate battery. Optional High-Output (HO option) and Extra High Output (EHO option), LTP battery type only, provides a wide variety of remote capacities and/or extended run-times.

### SELF-DIAGNOSTICS and REMOTE TEST (SDRT option):

Automatic 24-hour recharge after a 90-minute discharge

Advanced electrical design provides constant light output throughout the entire discharge period.

Brownout protection is automatically switched to emergency mode when supply voltage drops below approximately 80 percent nominal of 120, 220, 277 or 347. Other input voltages may vary.

 $\label{lem:AC/LVD} AC/LVD\ reset\ allows\ battery\ connection\ before\ AC\ power\ is\ applied\ and\ prevents\ battery\ damage\ from\ deep\ discharge.$ 

Self-Diagnostics: Continuously monitors AC functionality. Test switch and remote tester (RTKIT accessory) provide manual activation of 30-second diagnostic testing for on-demand visual inspection. Standard derangement monitoring will indicate disconnected battery, charger failure and displays green flashing indicator light while in emergency mode. Single multi-chromatic LED indicator to display two-state charging, test activation and three-state self-diagnostics.

Self-diagnostic testing: Five minutes every 30 days and 90 minutes annually. Diagnostic evaluation of lamps, AC to DC transfer, battery charging and condition of microprocessor. Automatic test is easily postponed for eight hours by activating manual test switch or use of remote tester (RTKIT accessory).

CLSR option: Connected Life Safety radio transmits monthly and annual test results and diagnostics information for automated reporting requirements.

INSTALLATION — Wall and ceiling mount standard. Blind-mate connector ensures easy installation and safe maintenance. 7/8" entrance provision at top of unit for standard 1/2" conduit entry. Tool-less removal of front cover from back-plate for ease of installation and maintenance.

LISTINGS — UL damp location listed standard and wet location listed when used with the WPVS accessory, all at 50-104°F (10-40°C). Meets or exceeds all applicable requirements for UL 924, NFPA 101 (current Life Safety code), NFPA 70 (NEC), NOM (Norma Oficial Mexicana), California Energy Commission Title 20 section 1605.3 (W)(4), FCC Title 47, Part 15, Subpart B and OSHA. List and labeled to comply with Canadian Standards C22.2 No. 141-10.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

† Small Battery Chargers Certified in the CA Title 20 Appliance Efficiency Database.













Catalog Number	
Notes	
Туре	



Contemporary Commercial LED Emergency Light





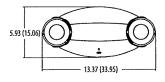
**ELM4L** 640 Lumens

ELM6L 1100 Lumens

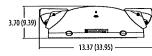
LITHIUM IRON PHOSPHATE
NICKEL CADMIUM

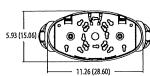


### MOUNTING









### Specifications

Length: 13 3/8 (33.95)
Depth: 3 45/64 (9.39)
Height: 5 15/16 (15.06)
Weight: ELMAL 3 Ib (1.4kg)
Weight: ELMGL 3 Ib (1.4kg)
Weight: ELMGL HO 3.5 Ibs (1.59 kg)
Weight: ELMGL ELMGL The kg)



Submitted By S L BAGBY CO Catalog Number ELM6L UVOLT LTP SDRT

Notes

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# **ELM4L-ELM6L** Quantum® LED Contemporary Commercial Emergency Light



### **NICKEL CADMIUM BATTERY MODELS**

ORDARING INFORMATION For shortest lead times, configure product using bolded options.								
Ī	Lamp Type	Housing Color	Voltage	Battery Type	Automatic Testing	Options		
ELM4L <sup>1</sup> 640 lumens, adjustable optics	(blank) SP640L 640 lumen, 6.6 watt, Spot Pattern, two lamp	(blank) White B Black	(blank)   120-277 VAC, 50/60Hz   UVOLT   120 - 347 VAC, 50/60Hz	(blank) Nicad	(blank) None	(blank) none  WPVS Wet protective vandal shield <sup>2</sup> USPOM Assembled in the US  PM Pendant Mount <sup>3</sup>		

### Notes

- 1 Does not support remote loads
- Must be ordered when using for wet location applications.. WPVS breaks out and ships separately and color will
  match (ex: WPVS LRG B). Decreases delivered lumens up to 20%. See spec sheet <u>WPVS</u> for more information.
- 3 Pendant mount option will include a 12" long 3/8-16 UNC threaded rod and hardware. Not available with any other lengths.

### LITHIUM IRON PHOSPHATE BATTERY MODELS

ORDERING INFORMATION For shortest lead times, configure product using bolded options. Exam								Examp	le: ELN	16L UVOLT LTP SDR			
Series¹		Lamp Type		Housing (	Color	Voltage		Batte	ery Type	Automai	ic Testing	Options	
ELM4L	640 lumens, adjustable optics		10L 640 lumen, vatt, Spot Pattern, lamp	(blank) B	White Black	UVOLT	120 - 347 VAC, 50/60Hz	LTP	Lithium Iron Phosphate	(blank) SDRT	none <sup>2</sup> Self-diagnostics, remote test	HO EHO	Less lamp heads 4 High-output battery
ELM6L	1100 lumens, adjustable optics		00L 1100 lumen, watt, Spot Pattern, lamp							CLSR	Connected Life Safety Radio <sup>3</sup>	WPVS	Extra High-output battery Wet protective vandal shield <sup>5</sup>
												USPOM PM	Assembled in the US Pendant mount <sup>6</sup>

### Other Accessories: Order as separate catalog number.

 WPYS LRG W
 Wet protective vandal shield, white (must be used for wet location applications)

 WPYS LRG B
 Wet protective vandal shield, black (must be used for wet location applications)

 ELA WG1
 Wireguard, 13 3/4"H x 15 1/4"W x 6"D (see spec sheet <u>ELA-WG</u>).

 RTKIT
 Remote test kit, up to 40' away (includes goggles, laser and battery)



ELM4L-ELM6L mounted inside the WPVS

### Notes

- 1 Extended run-time or remote capacity is standard. New ELMRE and ELMRW style remotes are compatible with both SDRT and non-SDRT versions (see page 3).
- 2 Only available with ELM4L.
- 3 SDRT option required. Connected Life Safety radio transmits monthly and annual test results and diagnostics information for automated reporting requirements. Only available with LTP battery type.
- 4 ELM4L with LLH (less lamp heads) not available with SDRT. ELM6L with LLH only available with SDRT.
- 5 Must be ordered when using for wet location applications. WPVS breaks out and ships separately and color will match (ex: WPVS LRG B). Decreases delivered lumens up to 20%. See spec sheet <u>WPVS</u> for more information.
- 6 Pendant mount option will include a 12° long 3/8-16 UNC threaded rod and hardware. Not available with any other lengths.

( LITHONIA LIGHTING

ELM4L\_ELM6L



Submitted By S L BAGBY CO Catalog Number ELM6L UVOLT LTP SDRT

Notes

EM

# **ELM4L-ELM6L** Quantum® LED Contemporary Commercial Emergency Light

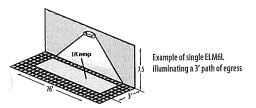
### **SPACING GUIDELINES**

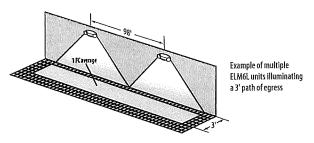
 ${\tt Note:} To see complete photometric report or download the .les file for this product, visit Lithonia Lighting ELMAL and ELM6L home page.$ 

Maximum	Spacing Guidel	ines ELM	4L1						
		Single L	uminaire	Multiple	.uminaire	A			
Mounting Helght	Illumination 3' Path Level Egres:		6' Path of Egress	3' Path of Egress	6' Path of Egress	Application Notes			
7.5'	1FC Avg <sup>1</sup>	62'	58'	67'	60'	100'Corridor, 8' wide, and			
10'	1FC Avg <sup>1</sup>	62'	58'	67'	60'	12' high with 80/50/20 reflectances			
7.5'	1FC Avg <sup>1</sup>	52'	40'	66'	58'				
10'	1FC Avg <sup>1</sup>	52'	48'	64'	60'	Retail open			
12'	1FC Avg <sup>1</sup>	521	48'	62'	59'	area: 200' X 15' X 30' with			
16'	1FC Avg <sup>1</sup>	52'	44'	61'	58'	80/50/20			
20'	1FC Avg <sup>1</sup>	44'	42°	60'	58'	reflectances			
24'	1FC Avg 1	34'	34'	42'	58'				

Maximum Spacing Guidelines — ELM6L <sup>1</sup>							
Mounting Helght		Single Luminaire		Multiple	A		
	Illumination Level	3' Path of Egress	6' Path of Egress	3' Path of Egress	6' Path of Egress	Application Notes	
7.5'	1FC Avg ¹	76'	74'	98'	90'	100' Corridor, 8' wide, and 12' high with 80/50/20 reflectances	
10'	1FC Avg¹	76'	74'	98'	88'		
7.5¹	1FC Avg 1	60'	48'	77'	68'		
10'	1FC Avg <sup>1</sup>	78'	56'	85'	82'	Retail open	
12'	1FC Avg <sup>1</sup>	68'	66'	77'	74'	area: 200' X 15' X 30' with 80/50/20	
16'	1FC Avg¹	72'	68'	72'	74'		
20'	1FC Avg ¹	66'	64'	70'	68'	reflectances	
24'	1FC Avg ¹	66'	56'	65'	62'		

Notes:
1. Also meets the additional illumination requirements of NFPA 101: .1FC minimum and max/min ration of 40:1.







Project 21-55978-0

Marvin Village Hall - New Construction

Submitted By S L BAGBY CO Catalog Number

ELM6L UVOLT LTP SDRT

Notes

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# **ELM4L-ELM6L** Quantum® LED Contemporary Commercial Emergency Light

### **REMOTES**

BATTERY CAPACITY AND LOADING						
Battery Option (LTP Only)	Battery Voltage	Total Capacity 90 Minutes	LP220L (1.2 Watts each) Maximum#Remote Lamps¹	SP640L (3.3 Watts each) Maximum # Remote Lamps'	SP1100L (5.3 Watts each) Maximum#Remote Lamps <sup>1,2</sup>	
ELM4L LLH LTP	9.6V	11 watts	9	3	2	
ELM4L LLH HO	9.6V	22 watts	18	6	4	
ELM4L LLH EHO	12.8V	32 watts	26	9	6	
ELM4L LTP	9.6V	11 watts	3	1	0	
ELM4L LTP HO	9.6V	22 watts	12	4	2	
ELM4L LTP EHO	12.8V	32 watts	21	7	6	
ELM6L LTP	9.6V	11 watts	0	0	0	
ELM6L LTP HO	9.6V	22 watts	9	3	2	
ELM6L LTP EHO	12.8V	32 watts	17	6	4	
ELM6L LLH LTP	9.6V	11 watts	9	3	2	
ELM6L LLH LTP HO	9.6V	22 watts	18	6	4	
ELM6L LLH LTP EHO	12.8V	32 watts	26	9	6	

- 1 These are in addition to the lamp heads on the product.
- 2 ELMRW not available with SP1100L lamp type. For SP1100L wet location applications, order ELMRE with WPVS.

### ELMRE Compatible Remotes<sup>1,2</sup>

### LTP Compatible Remote Accessories: Order as separate catalog number. ELMRE LP220L SGL<sup>1,2</sup> Single LED Indoor remote head, white. ELMRE LP220L T<sup>1,2</sup> Twin LED Indoor remote heads, white. ELMRE SP640L SGL<sup>1,2</sup> Single LED Indoor remote head, white. ELMRE SP640L T<sup>1,2</sup> Twin LED Indoor remote heads, white. ELMRE SP1100L SGL<sup>12</sup> $Single\,LED\,Indoor\,remote\,head, white.$ ELMRE SP1100LT12 Twin LED Indoor remote heads, white. ELMRW LP220L DDBTXD SGL<sup>1,3</sup> Single LED Wet Location remote head, dark bronze, 110 lumens ELMRW LP220L DDBTXD T 13 Twin LED Wet Location remote heads, dark bronze, 220 lumens ELMRW SP640L DDBTXD SGL<sup>1,3</sup> Single LED Wet Location remote head, dark bronze, 320 lumens ELMRW SP640L DDBTXD T13 Twin LED Wet Location remote heads, dark bronze, 640 lumens

- 1 Compatible with SDRT and non-SDRT versions.
- 2 Order the WPVS accessory for wet location listing and vandal protection.
- 3 See ELMRW Spec sheet for color options. Available in aluminum glossy, white glossy, black glossy, and dark



















ELMRE LP220L SGL

ELMRE LP220LT

ELMRE SP640L SGL

ELMRE SP640L T

ELMRE SP100L SGL

ELMRE SP1100L T









ELMRW LP220L DDBTXD T ELMRW SP640L DDBTXD SGL

EMERGENCY: One Lithonia Way, Conyers, GA 30012 Phone: 1-809-705-SERY (7378) techsupport-emergency@acultybrands.com www.lithonia.com

**ELMRW SP640L DDBTXD T** 

ELM4L\_ELM6L



Submitted By S L BAGBY CO Catalog Number ELM6L UVOLT LTP SDRT

Notes

EM

# **ELM4L-ELM6L** Quantum® LED Contemporary Commercial Emergency Light

### **SPECIFICATIONS**

ELECTRICAL						
Primary Circuit						
Туре	Volts	Input amps	Watts			
N/ A	120	0.032	3.15			
Nicad	347	0.036	3.15			
Lithium Iron	120	0.028	2.78			
Phosphate (SDRT)	347	0.033	2.78			
Lithium Iron	120	0.046	4.77			
Phosphate (HO option)	347	0.046	4.77			
Lithium Iron	120	0.052	5,95			
Phosphate (EHO option)	347	0.045	5.95			

BATTERY CAPACITY FOR EXTENDED RUN-TIMES						
Battery Option	Total Capacity 2 hours	Remote Capacity 2 hours*	Total Capacity 4 hours	Remote Capacity 4 hours*		
ELM4L - LTP	8.25 watts	NA	NA	NA		
ELM4L - HO	16.5 watts	9.9 watts	8.25 watts	NA -		
ELM4L EHO	24 watts	17.4 watts	12 watts	5.4 watts		
ELM6L-LTP	8.25 watts**	8.25 watts**	NA	NA		
ELM6L HO	16.5 watts	5.9 watts	8.25 watts**	8.25 watts**		
ELM6L EHO	24 watts	13.4 watts	12 watts	12 watts**		

Remote capacity left after using standard lamps shipped mounted on luminiare. ELMAL standard high performance LED lamp heads are rated at 3.3 watts each, delivering a total of 640 lumens. ELM6L standard high performance LED lamp heads are rated at 5.3 watts each, delivering a total of 1,100 lumens. These lamps are different in both wattage and performance from the LT24 compatible remotes.

BATTERY			
Nicad (6V)			
Typical Shelf life <sup>1</sup>	Typical life¹	Maintenance <sup>2</sup>	Temperature range <sup>3,4</sup>
3 years	7-9 years	none	50-104°F (10-40°C)
Lithium Iron Phosph Typical Sheif life <sup>1</sup>	ate (standard and Typical life¹	HO option) (9.6V)  Maintenance <sup>2</sup>	Temperature range <sup>3,4</sup>
		Maintenance*	range <sup>3,4</sup>
1 year	7-9 years	none	50-104°F (10-40°C
Lithlum Iron Phosph	ate (EHO option) (	12.8V)	
Typical Shelf life <sup>1</sup>	Typical life¹	Maintenance <sup>2</sup>	Temperature range <sup>3,4</sup>
1 year	7-9 years	none	50-104°F (10-40°C

### Notes

- 1 At 77°F ambient temperature, charge/discharge cycles and prolonged full discharge may reduce useful life.
- 2 All life safety equipment, including emergency lighting for path of egress must be tested in accordance with all National Fire Protection Association (NFPA) and local codes. Failure to perform the required testing could jeopardize the safety of occupants and will void all warranties.
- 3 Optimum ambient temperature range where unit will provide capacity for 90 minutes. Higher and lower temperatures affect life and capacity.
- 4 Battery life is negatively impacted by many variables including temperature, charging rates, number of cycles and deep discharges due to long periods of time without AC power.

<sup>\*\*</sup> LLH option only



Submitted By S L BAGBY CO Catalog Number WSX PDT WH

Notes

WOS

Catalog Number:	Date:	Project:

### OVERVIEW

The WSX Family of wall switch occupancy sensors provides simple and cost effective solutions for commercial and residential lighting control applications. All WSX Family sensors have a stylish low profile appearance, soft-click buttons, and provide small motion detection up to 20 ft (6.10 m), making them perfect for private offices, private rest rooms, closets, copy rooms, or any other small enclosed space. Additionally, all WSX Family sensors have a patent-pending wiring method that enables them to function either with or without a neutral connection. WSX units come pre-configured for wiring without a neutral, however if connection to neutral is required by code, contractors can convert the unit in seconds.

With optional flash programming via the Sensor Switch VLP mobile device application, users can easily change time delay, on mode and photocontrol settings.

### **FEATURES**

- Programmable with Sensor Switch VLP app or traditional push button, refer to ordering information for availability
- Compatible w/LEDs, electronic & magnetic ballasts, CFLs, & incandescents
- 100% passive detection, no potential for interference with other building systems
- Small motion detection to 20 ft
- Push-button programmable without removing cover plate adjustable time delays & operating modes
- Dual technology (PDT) utilizes PIR/Microphonics™ detection (patented)
- Self-grounding mounting strap
- Device accomodates powering over ground or neutral connection (patent pending)
- Ultra low current leakage (<0.5 mA) when connected via ground</li>
- Fully meets NEC 2017 Section 404.2C neutral requirements no current leakage to ground when connected to neutral
- Line power and load wires are interchangeable impossible to wire backwards (patented)
- Integrated Photocell (disabled by default) prevents light from turning on if sufficient daylight is
  present not available in Nightlight versions
- Vandal resistant lens

### Warranty

Five-year limited warranty. Complete warranty terms located at: <a href="https://www.acuitybrands.com/CustomerResources/Terms">www.acuitybrands.com/CustomerResources/Terms</a> and conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application.

Specifications subject to change without notice.

# **Acuity**Controls.

Sensor Switch

# WSX Family



WSX WSX PDT Single Relay WSX 2P WSX PDT 2P Dual Relay WSX NL WSX PDT NL Night Light









Submitted By S L BAGBY CO Catalog Number WSX PDT WH

Notes

WOS

### ORDERING INFORMATION

Series	Operating Mode <sup>1</sup>	Voltage	Visible Light Programming <sup>5</sup>	Colori	Temp / Humidity
WSX Passive infrared (PIR) WSX PDT Dual Technology (PIR/Microphonics™)	[blank] Auto-on (default) or vacancy  SA Vacancy (default) or auto-on  VA Vacancy only NL <sup>2</sup> Nightlight	[blank] 120-277 VAC 347 <sup>3</sup> 347 VAC	[blank] None VLP Visible Light Programming	WH White IV Ivory GY Gray AL Almond BK Black RD Red	[blank] Standard LT Low Temp! High Humldi

WSX DUAL RELAY		#50 P (# 1988)		Example: WSX 2P NL WH
Series	Operating Mode <sup>1</sup>	Voltage	Color <sup>4</sup>	Temp / Humidity
WSX 2P Passive infrared (PIR) WSX PDT 2P Dual Technology (PIR/Microphonics™)	[blank] Pole 1 auto-on Pole 2 vacancy 2SA Both poles vacancy (default) 2VA Both poles vacancy (only) NL <sup>2</sup> Nightlight	[blank] 120-277 VAC 347 <sup>3</sup> 347 VAC	WH White AL Lt. Almond IV Ivory BK Black GY Gray RD Red	[blank] Standard LT Low Temp/ High Humidity

### Notes:

- 1. Operating Modes reprogrammable via push-button except for VA version
- 2. Default set to Manual On, not available with VLP
- 3. Wall plates included in white or ivory only for 347 VAC units
- 4. Matching wall plate provided for 120/277 VAC units
- 5. Available only on WSX PDT Series.

### **SPECIFICATIONS**

Size: 2.74"H x 1.68"W x 1.63"D (not including ground strap)

Weight: 5 oz

Mounting: Single gang switch box

Mounting Height: 30-48 in

Maximum Load/Pole: (Relay) 800W @ 120VAC, 1200W @ 277VAC, 1500W @ 347VAC

Minimum Load: None Motor Load: 1/4 HP

Frequency: 50/60 Hz (timers are 1.2x for 50Hz)

Temperature Rating: 0°C-60°C



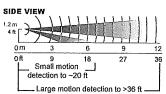
Submitted By S L BAGBY CO Catalog Number WSX PDT WH

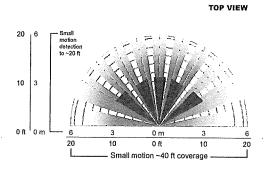
WOS

### **COVERAGE PATTERNS**

- Small motion (e.g., hand movements) detection up to 20 ft (6.10 m), ~625 ft<sup>2</sup>

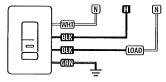
- Small motion (e.g., nand movements) detection up to 20 ft (6.10 m), ~625 ft²
   Large motion (e.g., walking) detection greater than 36 ft (10.97 m), ~2025 ft²
   Wall-to-Wall coverage
   Passive Dual Technology (Microphonics) provides overlapping detection of human activity over the complete PIR coverage area. Advanced filtering is utilized to prevent non-occupant noises from keeping the lights on keeping the lights on.
- Tested to NEMA WD 7-2011

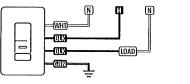


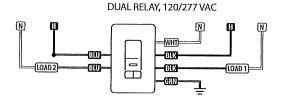


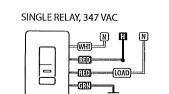
### **CONVERTIBLE NEUTRAL**

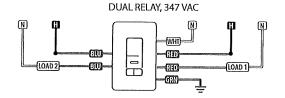
### SINGLE RELAY, 120/277 VAC





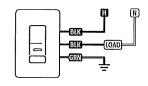


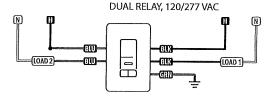




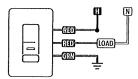
### **GROUND ONLY**

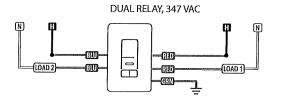
### SINGLE RELAY, 120/277 VAC





### SINGLE RELAY, 347 VAC





### Notes:

- Unit will draw power from either line connection.
- When switching 277 VAC or 347 VAC on both relays, the line inputs must be of the same phase.
- For dual relay, both relays must be fed from the same circuit.

WSX Family (IS-WSX-003)



Submitted By S L BAGBY CO Catalog Number WSX PDT WH

Notes

WOS OV

Project: Date: Catalog Number:

### **OVERVIEW**

The WSX Family of wall switch occupancy sensors provides simple and cost effective solutions for commercial and residential lighting control applications. All WSX Family sensors have a stylish low profile appearance, soft-click buttons, and provide small motion detection up to 20 ft (6.10 m), making them perfect for private offices, private rest rooms, closets, copy rooms, or any other small enclosed space. Additionally, all WSX Family sensors have a patent-pending wiring method that enables them to function either with or without a neutral connection. WSX units come pre-configured for wiring without a neutral, however if connection to neutral is required by code, contractors can convert the unit in seconds.

With optional flash programming via the Sensor Switch VLP mobile device application, users can easily change time delay, on mode and photocontrol settings.

### **FEATURES**

- Programmable with Sensor Switch VLP app or traditional push button, refer to ordering information for
- Compatible w/LEDs, electronic & magnetic ballasts, CFLs, & incandescents
- 100% passive detection, no potential for interference with other building systems
- Small motion detection to 20 ft
- Push-button programmable without removing cover plate adjustable time delays & operating modes
- Dual technology (PDT) utilizes PIR/Microphonics™ detection (patented)
- Self-grounding mounting strap
- Device accomodates powering over ground or neutral connection (patent pending)
- Ultra low current leakage (<0.5 mA) when connected via ground</li>
- Fully meets NEC 2017 Section 404.2C neutral requirements no current leakage to ground when connected to neutral
- Line power and load wires are interchangeable impossible to wire backwards (patented)
- Integrated Photocell (disabled by default) prevents light from turning on if sufficient daylight is present - not available in Nightlight versions
- Vandal resistant lens

### Warranty

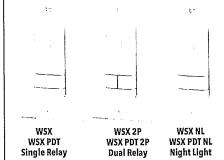
Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms and conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

# **Acuity**Controls...

Sensor Switch

# WSX Family











Submitted By S L BAGBY CO Catalog Number WSX PDT WH

Notes

WOS OV

### ORDERING INFORMATION

WSX SINGLE RELAY		E NIE			Example: WSX PDT WI
Series	Operating Mode	Voltage	Visible Light Programming <sup>s</sup>	Color	Temp / Humidity
WSX Passive infrared (PIR)  WSX PDT Dual Technology (PIR/Microphonics™)	[blank] Auto-on (default) or vacancy  SA Vacancy (default) or auto-on  VA Vacancy only  NL <sup>2</sup> Nightlight	[blank] 120-277 VAC 347 <sup>3</sup> 347 VAC	[blank] None VLP Visible Light Programming	WH White IV Ivory GY Gray AL Almond BK Black RD Red	[[blank] Standard Low Temp/ High Humidity

WSX DUAL RELAY				Example: WSX 2P NL WH
Series	Operating Mode <sup>1</sup>	Voltage	Color <sup>4</sup>	Temp / Humidity
WSX 2P Passive infrared (PIR) WSX PDT 2P Dual Technology (PIR/Microphonics™)	[blank] Pole 1 auto-on Pole 2 vacancy 2SA Both poles vacancy (default) 2VA Both poles vacancy (only) NL <sup>2</sup> Nightlight	[blank] 120-277 VAC 347 <sup>3</sup> 347 VAC	WH White AL Lt. Almond IV Ivory BK Black GY Gray RD Red	[blank] Standard LT Low Temp/ High Humidity

### Notes:

- 1. Operating Modes reprogrammable via push-button except for VA version
- 2. Default set to Manual On, not available with VLP
- 3. Wall plates included in white or ivory only for 347 VAC units
- 4. Matching wall plate provided for 120/277 VAC units
- 5. Available only on WSX PDT Series.

### **SPECIFICATIONS**

Size: 2.74"H x 1.68"W x 1.63"D (not including ground strap)

Weight: 5 oz

Mounting: Single gang switch box

Mounting Height: 30-48 in

Maximum Load/Pole: (Relay) 800W @ 120VAC, 1200W @ 277VAC, 1500W @ 347VAC

Minimum Load: None

Motor Load: 1/4 HP

Frequency: 50/60 Hz (timers are 1.2x for 50Hz)

Temperature Rating: 0°C-60°C

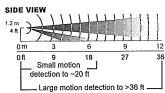
Submitted By S L BAGBY CO Catalog Number WSX PDT WH

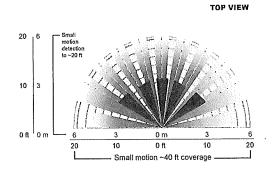
Notes

**WOS OV** 

### **COVERAGE PATTERNS**

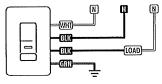
- Small motion (e.g., hand movements) detection up to 20 ft (6.10 m),  $\sim$ 625 ft² Large motion (e.g., walking) detection greater than 36 ft (10.97 m),  $\sim$ 2025 ft²
- Wall-to-Wall coverage
- Passive Dual Technology (Microphonics) provides overlapping detection of human activity over the complete PIR coverage area. Advanced filtering is utilized to prevent non-occupant noises from keeping the lights on.
  • Tested to NEMA WD 7-2011

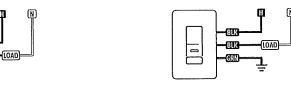


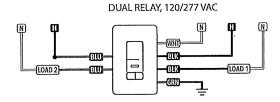


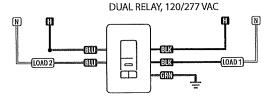
### **CONVERTIBLE NEUTRAL**

### SINGLE RELAY, 120/277 VAC





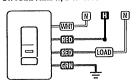


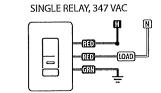


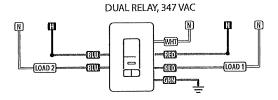
**GROUND ONLY** 

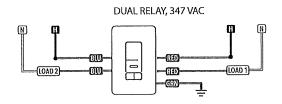
SINGLE RELAY, 120/277 VAC

### SINGLE RELAY, 347 VAC









- Unit will draw power from either line connection.
- When switching 277 VAC or 347 VAC on both relays, the line inputs must be of the same phase.
- For dual relay, both relays must be fed from the same circuit.

WSX Family (IS-WSX-003)



Submitted By S L BAGBY CO Catalog Number CM PDT 10

Notes

COS

Catalog Number: Date: Project:

### **OVERVIEW**

The CM family of ceiling mount occupancy sensors provide a range sensor solutions for applications with finished ceilings (e.g. ceiling tiles, sheetrock, plaster). CM family sensors utilize 100% digital Passive Infrared (PIR) detection and are available with several lens options, providing flexibility for multiple mounting height and coverage pattern requirements. Dual technology (PDT) occupancy detection can also be added as an option for applications where occupants are stationary for long periods of time. With optional flash programming via the Sensor Switch Mobile App, the user can easily change time delay, on mode and photocontrol settings.

### **FEATURES**

- Configurable using the Sensor Switch Mobile App
- 360° coverage pattern
- Push- button programmable, adjustable time delays, and multiple operating modes
- 100 hr lamp burn-in timer
- No field calibration or sensitivity adjustments required
- Convenient test mode
- Green LED indicator



CM
CM PDT
Ceiling Mount
Occupancy Sensor



### Warranty

Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms\_and\_conditions.aspx

**Note**: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice









### ORDERING INFORMATION

СМ												
Series	Detectio	n Technology	Cove	erage Type	Relay		Dimmin	g	Visible L Program		Temp/Hu	ımidity
CM Ceiling Mount Sensor	[blank] PDT'	PIR  Dual Technology (PIR/Microphonics)	6 9 10	High Bay 360° Small Motion 360° Large Motion 360° Hallway	[blank] R	None Low Voltage Relay	[blank] D P ADC <sup>2</sup>	Occupancy Controlled Dimming Photocell Photocell w/ Dimming	[blank] VLP3	None 6-8' Range Flash Programming via the Sensor Switch Mobile App	[blank] LT	Standard Low Temp High humidity

### Notes

- 1. PDT option not available on CM 6 models
- 2. ADC option not available on CM 6 models
- 3. Must specify P or ADC if VLP is ordered and must be within 5ft of sensor to program



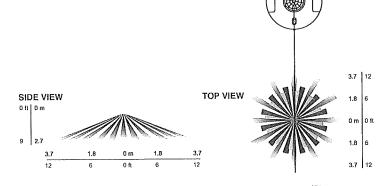
Submitted By S L BAGBY CO Catalog Number CM PDT 10

Notes

### **COVERAGE PATTERNS**

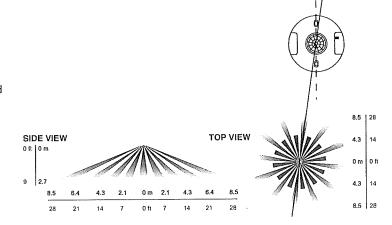
### Small Motion 360° (Model # CM 9/ CM PDT 91)

- Best choice for small motion (e.g. hand movements) detection
- 360° conical shaped pattern
- Provides 12 ft (3.66 m) radial coverage (~500 ft2) when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide 10 to 20 ft (3.05 to 6.10 m) radial coverage
- Lens assembly is marked with a gray ring around lens to differentiate versus the #10 lens
- Tested to NEMA WD 7-2011



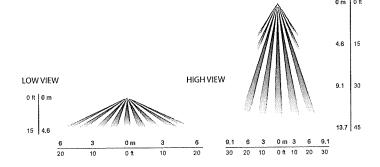
### Large Motion 360° (Model # CM 10/ CM PDT 101)

- Best choice for large motion detection (e.g. walking)
- 360° conical shaped pattern
- Provides ~24 ft (7.32 m) radial coverage (~2000 ft2) when mounted at 9 ft (2.74 m)
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage
- Detection range improves when walking across beams compared to into beams
- Tested to NEMA WD 7-2011



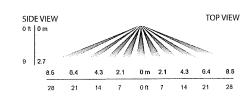
### High Mount 360° (Model # CM 6)

- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g. walking) up to 35 ft (10.76 m)
- Excellent detection of extra large motion (e.g. forklifts) up to a 45 ft (13.72 m)
- Tested to NEMA WD 7-2011



### High Mount Hallway (Model # CM 11/ CM PDT 111)

- Best choice for large motion detection
- Provides 28 ft (8.53 m) of coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57m) mounting heights provide 16 to 36 ft (4.88 to 10.97m) hallway coverage
- Tested to NEMAWD 7-2011
- 1. Sensors with Microphonics\* provides overlapping detection of human activity over the complete PIR coverage area. Advanced filtering is also utilized to prevent non-occupant noises from keeping the lights on.







Submitted By S L BAGBY CO Catalog Number CM PDT 10

Notes

COS

### WIRING (DO NOT WIRE HOT)

### STANDARD WIRING

RED - Power Input (12-24 VAC/VDC)

BLACK - Common

WHITE - Occupancy State (high VDC for occupied)

### PHOTOCELL / DIMMING OPTIONS (D, P, ADC)

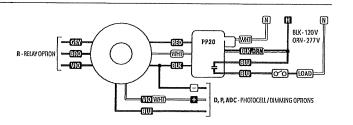
BLUE - Direct output to power pack for providing photocell control and/or secondary dim time out. Output is high VDC with occupancy & low light. Output also held high during secondary dim time out. For multi-level control, use two power packs and connect White wire to primary load and Blue to daylight load.

VIOLET w/ WHITE STRIPE - Connect to 0-10 VDC control wire (typically Violet) from 0-10 VDC dimmable ballast

GRAY from Ballast - Connect to sensor Black wire

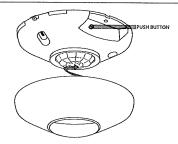
### **RELAY OPTION (R)**

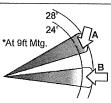
GRAY / BROWN - Connected during occupied state VIOLET / BROWN - Connected during unoccupied state Note: Relay is energized during unoccupied state



### INSTALLATION

- Mount sensor directly to a ceiling tile or a metallic grid (two self-tapping screws provided).
- Sensor's mounting holes also align with 3.5" octagon or single gang handy box (screws not provided).
- Sensor will detect motions crossing segments more effectively than motions parallel to beams.
- For optimal detection, position sensor such that segments are crossed upon entrance and unable to view outside the space.
- PDT models: For maximum Microphonics sensitivity avoid locating sensor near HVAC air diffusers





A: When walking across beam, detection will occur at approximately 28 feet. (8.53 m)

B: When walking into beam, detection will occur at approximately 24 feet. (7.32 m)



Submitted By S L BAGBY CO Catalog Number CM PDT 10

Notes

COS

### **SPECIFICATIONS**

**Electrical** 

Input Ratings Class 2 Input 24V max, 4mA

Class 2 Input 24V max, 16mA (-R Option)

Relay Type Electrically held

Low Voltage Output Ratings 0-10VDC, Sinks <20mA

Standards/ Ratings Energy Management Equipment, UL916 (E167435)

Mechanical

Dimensions 4.55"W x 1.55"D (116mm x 40mm)

Mounting Single-Gang or Octagonal Box, Surface Mount

Color White Finish Matte

Connection Type Low Voltage Leads

**Environmental** 

Warrantied Operating Temperature Standard: 14°F to 185°F (-10°C to 85°C)

PDT option: 14°F to 140°F (-10°C to 60°C) LT option: -4°F to 185°F (-20°C to 85°C) PDT LT options: -4°F to 140°F (-20°C to 60°C)

Relative Humidity Up to 90%, Non-Condensing

Environment Indoor
Standards/ Ratings RoHS



Submitted By S L BAGBY CO

Catalog	Numbe
PP20	

Notes



Date:	Project:

### **OVERVIEW**

Power packs are the heart of the low voltage sensor system. A PP20 Series power pack transforms Class I high voltage (120/277 VAC) to Class 2 15 VDC for powering remote sensors. The PP20 and the SP20 Series slave pack are also capable of switching lighting loads on and off using their internal relays. Class 2 wire leads connect to 18 to 22 AWG low voltage cable running to the sensors, making installation easy and clean. Power packs also have an elongated chase nipple that allows it to be mounted either directly through a ½ inch knockout into a junction box, or inside an adjacent box for meeting specific local code requirements in ceiling plenums.

The most versatile power pack is the PP20, which utilizes a patented relay contact protection and can power up to 14 sensors. Dual-circuit control can be handled by two PP20's, one PP20 2P Series 2-Pole power pack, or a PP20 power pack and a SP20 slave packs.

### **FEATURES**

- Powers Low Voltage Sensors (PP20/PP20 2P only)
- Self-Contained Relay(s) Switch Line Voltage Loads
- · Relay Contact Protection
- Plenum Rated



PP20 PP20 2P SP20 Power Pack



### Warranty

Three-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms and conditions.aspx

**Note**: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.



### ORDERING INFORMATION

PP20		T	Example: PP20 2P LT
Series	≢ of Poles	Voltage	Temperature/Humidity
PP20 Power/ Relay Pack SP20 Secondary Relay Pack	[blank] 1 2P 2 <sup>1</sup>	[blank] 120/277 VAC	[blank] Standard   LT Low Temp/High Humidity

Note:

1. Not available for SP20.



Submitted By S L BAGBY CO

Catalog Number PP20

Notes

PP

### **SPECIFICATIONS**

Electrical Specifications	Input Ratings	PP20:120/277VAC, 50/60 Hz; PP20 2P: 120/277VAC, 50/60 Hz; SP20 15 VDC
·	Output Ratings	120/277VAC, 20A - General Use 240VAC, 1 HP - Motor 120VAC, 5A, 600 W - Tungsten; PP20 2P: 120-277VAC, 20A - General Use 240VAC, 1 HP - Motor 120VAC, 5A, 600 W - Tungsten; SP20: 120/277VAC, 20A - General Use 240VAC, 1 HP - Motor 120VAC, 5A, 600 W - Tungsten
	Relay Type	Latching/ PP20 2P: Latching; SP20: Latching
	Low Voltage Output Ratings	PP20: 15VDC, 20A per pole (150mA total); PP20 2P:15VDC, 20A per pole (150mA total); SP20:
	Standards/ Ratings	Energy Management Equipment, UL916 (E167435); PP20 2P: Energy Management Equipment, UL916 (E167435); SP20: Energy Management Equipment, UL916 (E167435)
Mechanical	Dimensions	$3.00\text{"H}\times2.25\text{"W}\times1.88\text{"D}$ (76mm x 57mm x 48mm) - not including chase nipple; PP20 2P: 4.13"H x 3.00"W x 1.88"D (105mm x 76mm x 48mm) - not including chase nipple; SP20: 3.00"H x 2.25"W x 1.88"D (76mm x 57mm x 48mm) - not including chase nipple
	Mounting	1/2" Knockout (7/8" hole) PP20 2P: 1/2" Knockout (7/8" hole) SP20: 1/2" Knockout (7/8" hole)
	Color	Black/ PP20 2P: Black; SP20: Black
	Connection Type	Line-Voltage Leads; PP20 2P: Line-Voltage Leads; SP20: Line-Voltage Leads
Environmental	Warrantied Operating Temperature	14°F to 122°F (-10°C to 50°C) 14°F to 113°F (-10°C to 45°C) if enclosed within a junction box/ PP20 2P: 14°F to 122°F (-10°C to 50°C) 14°F to 113°F (-10°C to 45°C) if enclosed within a junction box / SP20: 14°F to 122°F (-10°C to 50°C) 14°F to 113°F (-10°C to 45°C) if enclosed within a junction box
	Relative Humidity	Up to 90%, Non-Condensing; PP20 2P: Up to 90%, Non-Condensing; SP20: Up to 90%, Non-Condensing
	Standards/ Ratings	PP20: RoHS, Plenum UL2043; PP20 2P: RoHS, Plenum UL2043; SP20: RoHS, Plenum UL2043
	Standards/ Ratings	System Component to aid in compliance with Title 24/PP20 2P: System Component to aid in compliance with Title 24; SP20: System Component to aid in compliance with Title 24



Submitted By S L BAGBY CO Catalog Number PP20

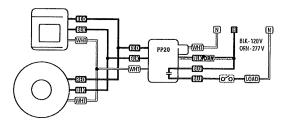
Notes

PP

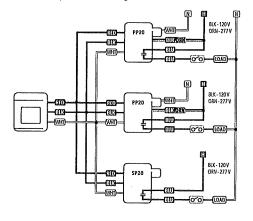
### WIRING (DO NOT WIRE HOT)

Note: The Power Pack must be connected to a single phase Hot and Neutral System. For 120 VAC, connect the Black wire to Hot, White wire to Neutral, and Cap off the Orange/Red wire. For 240-277 VAC, connect the Orange to Hot, White to Neutral, and Cap off the Black Wire. Never connect both the Black and Orange wires! Low Voltage wire can be 18 to 22 AWG; shielding is not necessary. Class II terminal block on PP20 2P only accepts one conductor, 18 AWG stranded or smaller, per terminal. The relays on PP20 2P are isolated allowing for connection of 120 VAC on one relay, and 277 VAC on the other.

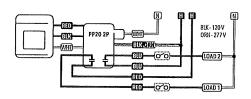
### Multiple Sensors Controlling One Circuit



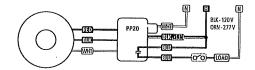
### Wiring Multiple Power Packs Together



### One Sensor Controlling Two Circuits



### One Sensor Controlling One Circuit



### **POWERING CAPACITY**

A power pack's transformers can supply up to 150 mA of power. Each relay requires 40 mA during the on state. Low voltage remote sensors typically require 3 mA when detecting occupants, and 0.15 mA when in standby. Therefore, each transformer can handle up to 3 relays (including the relay(s) inside the power pack). For example, one PP20 can power its relay (40 mA) and 110 mA of external devices. Because of the ultra low current design of the sensors, up to 14 or more sensors can be connected to a single power pack! If multiple power packs are used together, an additional 110 mA is available.

### Note:

Only three relays may be controlled with one Power Pack. If more than three circuits are required, multiple power packs must be used. The R option adds an isolated low voltage relay to a sensor. Only one sensor with this option is typically needed in a room.

	Sensors	Sensors w/R option
1 PP20	14	8
1 PP20 2P	7	6
1 PP20 w/SP20	7	6
1 PP20 2P w/SP20	5	5
2 PP20	28	16
2 PP20 2P	14	12



Submitted By S L BAGBY CO Catalog Number SPODMRD WH

Notes

DIMM

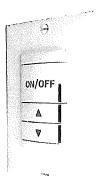
Catalog Number:	Date:	Project:

### **OVERVIEW**

The push-button Dimming Switchpod Series of wall stations are a cost effective solution for commercial and residential lighting applications. Additionally, all sPODMRD sensors have a patent pending wiring method that enables them to function either with or without a neutral connection. sPODMRD units come preconfigured for wiring without a neutral, however, if a connection to neutral is required by code, contractors can convert the unit in seconds.



### SPODMRD Dimming Switchpod





Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/resources/terms-and-conditions

**Note**: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice



### ORDERING INFORMATION

SPODMRD					Example: sPODMRD 347 WH
Series sPODMRD <sup>2</sup> Dimming Switchpod	eldoLED  [blank] None  EZ¹ eldoLED Driver Compatibility	Voltage [[blank] 120/277 VAC] 3473 347 VAC	Color*  WH White  IV Ivory  GY Gray  AL Light Almond  BK Black  RDS Red	Max Dim Level <sup>6</sup> [blank] 10 VDC 9H 9 VDC 8H 8 VDC 7H 7 VDC	Min Dim Level

### Note

- 1. Max Dim Level default set to 9.1VDC. Min Dim Level default set to 1.5VDC.
- 2. 3-way switching not supported.
- 3. Wall plated included for white or ivory only for 347 VAC units.
- 4. Matching wall plate provided for 120/277 VAC units.
- 5. Special Order.
- 6. For setting other than default, minimum order quantity of 30 units.



Submitted By S L BAGBY CO

Catalog Number SPODMRD WH

Notes

### WIRING

### CONVERSION FROM GROUND ONLY (NO NEUTRAL) TO NEUTRAL WIRING

This product is pre-configured for wiring without a neutral; however, if connection to neutral is required by code, the unit easily converts in seconds.



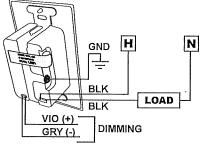
Step 2: Loosen Screws and Remove Metal Link



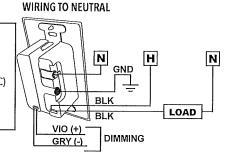
Step 3: Connect Neutral to Silver Screw and Ground to Green Screw



WIRING TO GROUND (NO NEUTRAL)



WIRE COLOR KEY 120/277 VAC WIRING \*BLACK wires - Line Input BLACK\* BLACK\* - Load Output ∫ can be reversed VIOLET - Low Voltage Dim Output (0-10 VDC) GRAY -Low Voltage Common 347 VAC WIRING (-347 Option) Red wires replace Black wires.



NOTES:

- Per NEC requirements, the 0-10V violet and gray wires must be installed as Class One.
- The 0-10V control wires must not exceed 250 ft (76 m) in length and must be sized at no less than 20 AWG.

### **OPERATIONAL SETTINGS**

### 2= Time Out

Time after which light will turn Off. One minute prior to expiration, LED on dimmer will begin blinking and the light level in the space will adjust to 3

9 = 720.0 min

5 = 60.0 min 2 = 10.0 min 6 = 90.0 min

3 = 15.0 min 7 = 120.0 min 4 = 30.0 min 8 = 180.0 min

### 9= Restore Defaults

1 - Maintain Current\*

2 - Restore Defaults

15	= Di	imm	ing	Range	Max	(High	Trim)
				1 1 7.1			

The maximum output level of the sensor. 1 - 0 VDC 5-3 VDC 9-7 VDC 13 - 10 VDC\* 2-1 VDC 6-4 VDC 10-8 VDC

8 - 6 VDC 12 - 9.1 VDC\*\*

4 - 2 VDC

\*\*Default for EZ option

### 16 = Dimming Range Min (Low Trim) The minimum output level of the sensor.

1 - 0 VDC 5-3 VDC 9-7 VDC 2 - 1 VDC\* 6-4VDC 10-8VDC 7-5VDC 11-9VDC 4 - 2 VDC 8 - 6 VDC 12 - 9.1 VDC

\*\*Default for EZ option

### 19 = Fade On Rate

Time required for light to reach preset level.

1 · 0.75 sec\* 3 · 5 sec 2 - 2.5 sec 4 - 15 sec

### 20 = Fade Off Rate Time required for light to turn Off.

1 - 0.75 sec 3 - 5 sec

2 - 2.5 sec\* 4 - 15 sec

### 21= Start Level

Level of light output when switched on.

1 - 10% 5 - 50% 9-90% 2 - 20% 6-60% 10 - 100% 3 - 30% 7 - 70% 4-40% 8 - 80%

\* Default Setting



Submitted By S L BAGBY CO Catalog Number SPODMRD WH

Notes

DIMM

### **SPECIFICATIONS**

Electrical

Input Ratings 12-24VAC/VDC, 5mA

Output Ratings Sinks < 20mA - 800 W @ 120VAC

- 1200 W @ 277VAC - 1500 W @ 347VAC

Mechanical

Dimensions 2.74"H x 1.68"W x 1.63"D (70mm x 43mm x 41mm) - does not include ground strap

Mounting Single-Gang Box or Low Voltage Ring

Connection Type Low Voltage Leads

**Environmental** 

Warrantied Operating Temperature -22°F to 185°F (-30°C to 85°C)

Relative Humidity Up to 90%, Non-Condensing

Standards/ Ratings RoHS

General

Standards/ Ratings CEC Title 20



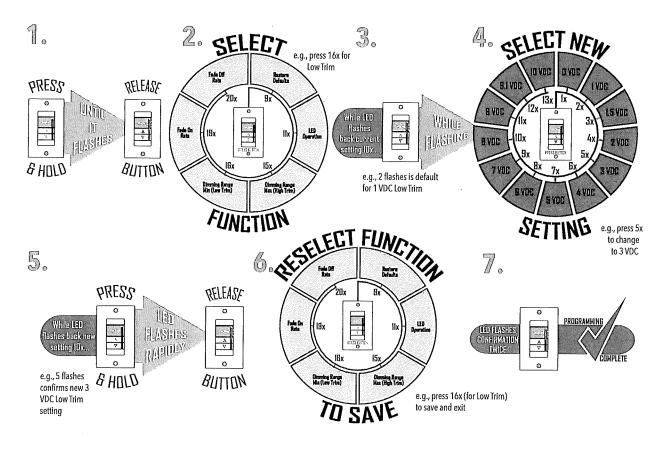
Submitted By S L BAGBY CO Catalog Number SPODMRD WH

Notes

DIMM

### PROGRAMMING INSTRUCTIONS

Operational settings can be changed via the push-button sequence outlined below (note the example used is for changing the Low Trim setting).





Submitted By S L BAGBY CO Catalog Number SPODMRA MWO D WH

Notes

3W DIMM

Catalog Yorkher: Dove Project:

### **OVERVIEW**

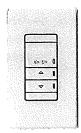
The push-button Dimming Series of wall stations are a cost-effective solution for commercial lighting applications. Additionally, all sPODMRA switches have a patent pending wiring method that enables them to function either with or without a neutral connection. sPODMRA units come preconfigured for wiring without a neutral, however, if a connection to neutral is required by code, contractors can convert the unit in seconds.

### **FEATURES**

- · Programmable without removing switch plate
- · MWO option supports up to 9 MWO devices when using a neutral
- sPODMRA MWO can be used in conjunction with WSXA MWO
- · Compatible with 0-10V dimming
- Include Screwless Wall Plate: Available in WH, IV, GY, AL, BK, RD
- · Each MWO device can switch and dim individually
- Switching and Dimming will be performed simultaneously across the devices connected through the communication wire.



### sPODMRA Series Dimming Wall Switch



sPODMRA D On/Off/Dimming Single Relay

### Warranty

Five-year limited warranty. Complete warranty terms located at: <a href="https://www.acuitybrands.com/support/warranty/terms-and-conditions">www.acuitybrands.com/support/warranty/terms-and-conditions</a>

Note: Actual performance may differ as a result of end-user environment and application.

Course our elegan services in many contract with a facility of

Specifications subject to change without notice.





### ORDERING INFORMATION

podmra	T				sPODMRA D 347 WH	
eries	eldoLED	Dimming	Voltage	Color³	Max Dim Level <sup>4</sup>	Min Dim Level
sPODMRA Switchpod	(blank) none	D Dimming	[blank] 120-277 VAC	WH White	[blank] 10 VDC	[blank] 0 VDC
sPODMRA MWO Switchpod with Multi-way	EZ¹ eldoLED Driver		347 <sup>2</sup> 347 VAC	IV Ivory	9H 9 VDC	1V 1 VDC
Operation	Compatibility			GY Gray	8H 8 VDC	2V 2 VDC
				AL Almond	7H 7 VDC	3V 3 VDC
				BK Black		4V 4 VDC
				RD Red		SV 5 VDC
						6V 6 VDC

### Notes

- Max Dim Level default set to 9.1 VDC. Min Dim Level default set to 1.5 VDC.
- 2. Matching wall plate not included with 347 VAC units.
- 3. Matching wall plate provided for 120-277 VAC units.
- 4. For setting other than default, minimum order quantity of 30 units.



Submitted By S L BAGBY CO Catalog Number SPODMRA MWO D WH

**3W DIMM** 

**SPECIFICATIONS** 

Electrical

Input Ratings 120-277VAC, 50/60 Hz

347VAC, 50/60 Hz (with 347 option)

Output Ratings 120VAC, 800W, 6.7A - Tungsten, Standard Ballast, Electronic Ballast 277VAC, 1200W, 4.3A - Tungsten, Standard Ballast, Electronic Ballast

347VAC, 1500W, 4.3A - Tungsten, Standard Ballast, Electronic Ballast

120/277/347VAC, 1/4 HP - Motor

Relay Type Latching

Low Voltage Output Ratings 0-10VDC, Sinks <50mA

Standards/ Ratings Energy Management Equipment, UL916 (E167435)

Mechanical

**Dimensions** 2.74"H x 1.68"W x 1.63"D (70mm x 43mm x 41mm) - does not include ground strap

Mounting Single-Gang Box

Connection Type Low-Voltage Leads, Line-Voltage Leads

Environmental

Warrantied Operating Temperature  $32^{\circ}F$  to  $140^{\circ}F$  (0°C to  $60^{\circ}C$ )

Relative Humidity Up to 90%, Non-Condensing

Standards/Ratings RoHS



S L BAGBY CO

Catalog Number SPODMRA MWO D WH

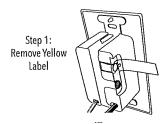
Notes

3W DIMM

### WIRING

### CONVERSION FROM GROUND ONLY (NO NEUTRAL) TO NEUTRAL WIRING

This product is pre-configured for wiring without a neutral; however, if connection to neutral is required by code, the unit easily converts in seconds.



Step 2: Loosen Screws and Remove Metal Link

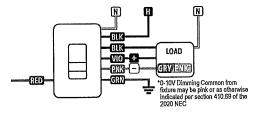


Step 3: Connect Neutral to Silver Screw and Ground to Green Screw



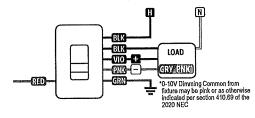
### **CONVERTIBLE NEUTRAL**

SINGLE RELAY, 120-277 VAC

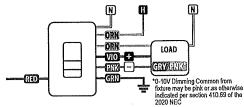


### **GROUND ONLY**

SINGLE RELAY, 120-277 VAC

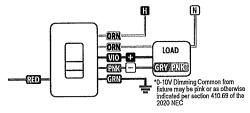


### SINGLE RELAY, 347 VAC



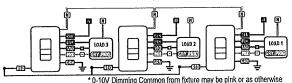


### SINGLE RELAY, 347 VAC



SINGLE RELAY, MULTI-WAY

### SINGLE RELAY, MULTI-WAY CONFIGURATION, 120-277 VAC



0-10V Dimming Common from fixture may be pink or as otherwise indicated per section 410.69 of the 2020 NEC Note: up to 9 with neutral

Note: up to 2 with neutral-less

### CONFIGURATION, 120-277 VAC

\*0-10V Dimming Common from fixture may be pink or as otherwise indicated per section 410.69 of the 2020 NEC

### WIRE COLOR KEY

### **120-277 VAC WIRING**

Line Input

BLK Line Output

Low Voltage Dim Output (0-10 VDC) VIO

Low Voltage Common (0-10VDC)

Low Voltage Communication Wire

### 347 VAC WIRING (-347 Option)

Orange (ORN) wires replace black (BLK) wires

Notes:

1. Some Pink wires may come as Gray

### NOTES

- All load controls act in unison
- Black wires can be used interchangeably
- Violet and pink wires are not present on devices without D option
- Cap off violet and pink wires if dimming functionality is not being used
- Red Wire is not present on devices without MWO option
- Cap off red wire if Multi-Way functionality is not being used
- For ground Multi-Way Configurations ground must come from same source
- For neutral conversion Multi-Way Configurations power must come from the same panel

- Per NEC requirements, the 0-10V violet and pink wires must be installed as Class One.
- SPODMRA MWO paired with WSXA MWO will act accordingly with WSXA occupancy settings
- The 0-10V control wires must not exceed 250 ft (76 m) in length and must be sized at no less than 20 AWG
- The Low Voltage Communication BUS must not exceed 250 ft (76 m) in length and must be sized at no less than 20 AWG
- Dimming wires from individual MWO devices should only connect with fixture/driver dimming wires and never to another MWO device

### SATCO | NUVO

Project Name Marvin Village Hall Type: G & G1 -Part #: S29589 Prepared By Location

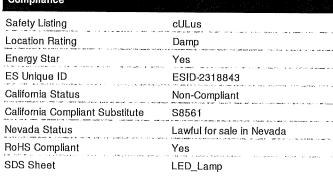


**SATCO S29589** 

9.5A19/LED/30K/ND/120V/4PK

Notes

General	
Status	Active
Watts	9.5
Incandescent Equivalent	60
Fluorescent Equivalent	13
Volts	120V
Shape	A19
Base	Medium
ANSI Base	E26
Finish	Frosted White
CCT (Kelvin)	3000
Temperature	Warm White
CRI	83
Lumens	800
Beam Spread	220
Dimmable	Non-Dimmable
Hours Rated	15000
Lamp Type	Туре А
Technology	LED
Electrical	
Power Factor	0.6
incomment is the instrument weigns and a new contrast of the particular was	0.6
Operating Temperature	-25C (-13F) to a maximum of +45C (+113F)
Discrete at	
Physical	
MOL	4.31
MOD	2.38
Additional Information	
Rated For Enclosed Fixture	Yes
Warranty	3 Year Limited - 10 hr per day
Compliance	
Safety Listing	cULus
Location Rating	Damp
Energy Star	Yes
ES Unique ID	ESID-2318843
California Status	Non-Compliant
California Compliant Substitute	S8561
The service of the companies of the comp	The state of the contract and the same state and a contract of the same of the





### **SPECIFICATIONS**

### Certifications/Qualifications

www.kichler.com/warranty

Not Included

umensions

Base Backplate 6.25 X 6.75

Extension 8.75" 4.95 LBS

Weight 3.75" Height from center of Wall opening

(Spec Sheet)

13.50" Height 8.00" Width

**Light Source** 

Lamp Included

A19 Lamp Type Incandescent Light Source

100W Max or Nominal Watt # of Bulbs/LED Modules Max Wattage/Range 100W Medium Socket Type 150" Socket Wire

Mounting/Installation

Interior/Exterior Exterior Wet Location Rating 2.75 LBS Mounting Weight

### FIXTURE ATTRIBUTES

Housing

Satin Etched Diffuser Description **ALUMINUM** Primary Material

**Product/Ordering Information** 

~..⁄U 49687BK Black sh Transitional Style 783927560085 UPC

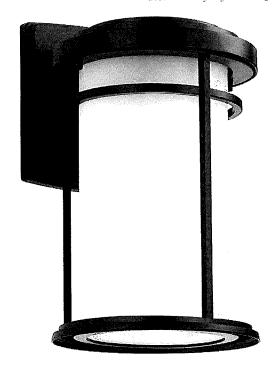
### Finish Options





JOB: MARVIN VILLAGE HALL

TYPE: G1 PART#: 49687BK



### ALSO IN THIS FAMILY









49690BK





49689OZ

Charles And Andrews

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### **SPECIFICATIONS**

### Certifications/Qualifications

### www.kichler.com/warranty

4.25"

### **Dimensions**

Base Backplate 8.00 X 8.25 Extension

Weight 8.14 LBS

Height from center of Wall opening

(Spec Sheet)

Height 20.00" Width 10.00"

**Light Source** 

Lamp Included Not Included

Lamp Type A21

Light Source Incandescent 150W

Max or Nominal Watt # of Bulbs/LED Modules

Max Wattage/Range 150W Socket Type Medium Socket Wire 150"

Mounting/Installation

Interior/Exterior Exterior Location Rating Wet Mounting Weight 4.49 LBS

### FIXTURE ATTRIBUTES

### Housing

Diffuser Description Satin Etched Primary Material ALUMINUM

### **Product/Ordering Information**

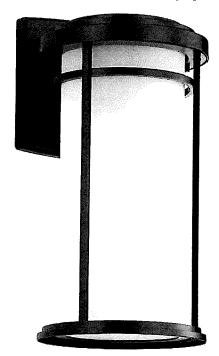
SKU 49688BK Finish Black Style Transitional UPC 783927560092

### **Finish Options**





### 11.00" Job: Marvin Village Hall Type: G Part #: 49688BK



### ALSO IN THIS FAMILY









49690BK



49686BK

49689OZ

reparent sneet



Construction Materials Testing Services
Marvin Village Hall
Marvin, North Carolina
Terracon Proposal No: P71211127

Since principle   South   So	Task Description	Unit	Rate	Estimate	Cost
Site Backfill - Estimate 6 trips at 4 hours per trip   hour   \$60.00   24   \$1,440.00   \$0   \$240.00   \$0   \$150.00   \$0   \$150.00   \$0   \$150.00   \$0   \$0   \$0   \$0   \$0   \$0   \$0	I Site Backfill				
Charge	Engineering Technician				** ***
- Including Trip Charge and Mileage	·	hour	\$60.00	24	\$1,440.00
Stallow Foundation Evaluation Shallow Foundation Evaluation Shallow Foundation Deservations - estimate 3 trips at 5 hours per trip Including Mileage Including Steel Placement Observations - Estimate 3 trips at 5 hour per trip Including Steel and Concrete Placement Observations - Estimate 3 trips at 5 hour per trip Including Steel and Concrete Placement Observations - Estimate 3 trips at 5 hour per trip Including Steel and Concrete Placement Observations - Estimate 3 trips at 5 hour per trip Including Steel and Concrete Placement Observations - Estimate 3 trips at 5 hour seach. Reinforcing Steel and Concrete Placement Observations - Estimate 3 trips at 5 hour seach. Reinforcing Steel Observations to be performed one hour prior to concrete placement.  Slab on Grade Including Mileage Including Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel Observations to be performed one hour prior to concrete placement.  Estimate 1 set of cylinders per pour, 6 cylinders per set Slab on Grade Including Mileage Includ		each	\$40.00	6	\$240.00
- Standard Proctor Test - estimate 1 sample - Soil Classifications - estimate 1 sample - Soil Classifications - estimate 1 sample    Site Grading:   Standard   Stand	<u> </u>	Cuon	φ-τυ.συ	Ü	φ2 (5,55
Soil Classifications - estimate 1 sample   each   \$150.00   1   \$180.00   5   \$2,005.00	•	each	\$175.00	1	\$175.00
Shallow Foundation Evaluation  gineering Technician  - Shallow Foundation Observations - estimate 3 trips at 5 hours per trip  - Including Mileage  - Including Mileage  - Reinforced Concrete Sampling and Testing  gineering Technician  - Reinforcing Steel Placement Observation, Concrete Placement Observation.  Shallow Foundations  - Reinforcing Steel and Concrete Placement Observations - Estimate 3 trips at 5 hours each. Reinforcing Steel Observations to be performed one hour prior to concrete placement.  - Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel Cobservations to be performed one hour prior to concrete placement.  - Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel Observations to be performed one hour prior to concrete placement.  - Concrete Cylinders per pour, 6 cylinders per set  - Concrete Cylinder Pick Up - Estimate 4 trips at lump sum portangement  - Compressive Strength Testing - Estimate 6 sets, 6 cylinders each Reinforced Concrete Sampling and Testing:  - Compressive Strength Testing - Estimate 6 sets, 6 cylinders each Reinforced Concrete Sampling and Testing:  - Report Preparation/Data Entry placed Management  - Report Preparation/Data Entry - Report Review/Document Management/Meetings/Special Inspections - Evaluation/Consultation - Report Review/Document Management/Meetings/Special Inspections - Report Review/Document Management/Meetings/Speci	•	each	\$150.00	1	
- Shallow Foundation Observations - estimate 3 trips at 5 hours per trip - Charge - Including Mileage - Including Mileage - Including Mileage - Including Mileage - Reinforced Concrete Sampling and Testing gineering Technician - Reinforcing Steel Placement Observation, Concrete Placement Observation.  Shallow Foundations - Reinforcing Steel and Concrete Placement Observations - Estimate 3 trips at 5 hours each. Reinforcing Steel Observations to be performed one hour prior to concrete placement.  Estimate 1 set of cylinders per pour, 6 cylinders per set  Slab on Grade - Reinforcing Steel Observations to be performed one hour prior to concrete placement.  Estimate 3 sets of cylinders per pour, 6 cylinders per set  - Concrete Cylinder Pick Up - Estimate 4 trips at lump sum trip \$180.00 4 \$720.00 p. Charge - Including Mileage - Including Mileage - Compressive Strength Testing - Estimate 6 sets, 6 cylinders each Reinforced Concrete Sampling and Testing:  - Report Preparation/Data Entry - Report Review/Document Management/Meetings/Special Inspections - Evaluation/Consultation - Reinforced Sampling and Testing - Estimate of the prior trip shour sho			S	Site Grading:	\$2,005.00
- Shallow Foundation Observations - estimate 3 trips at 5 hours per trip of Charge - Including Mileage - Reinforced Concrete Sampling and Testing gineering Technician - Reinforcing Steel Placement Observation, Concrete Placement Observation.  Shallow Foundations - Reinforcing Steel Placement Observations - Estimate 3 trips at 5 hours each. Reinforcing Steel Observations to be performed one hour prior to concrete placement Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours Steel and Concrete Steel Observations of the Steel Observations o					
charge - Including Mileage each _\$40.00 _ 3 _ \$120.00		bour	¢60.00	15	የዐበባ በና
- Including Mileage  Reinforced Concrete Sampling and Testing  gineering Technician - Reinforcing Steel Placement Observation, Concrete Placement Observation.  Shallow Foundations - Reinforcing Steel and Concrete Placement Observations - Estimate 3 trips at 5 hours each. Reinforcing Steel Observations to be performed one hour prior to concrete placement.  Estimate 1 set of cylinders per pour, 6 cylinders per set  Slab on Grade - Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel Observations to be performed one hour prior to concrete placement.  Estimate 3 sets of cylinders per pour, 6 cylinders per set  Lestimate 3 sets of cylinders per pour, 6 cylinders per set  - Concrete Cylinder Pick Up - Estimate 4 trips at lump sum processive Strength Testing - Estimate 6 sets, 6 cylinders each  Encluding Mileage - each \$40.00 4 \$160.00  Reinforced Concrete Sampling and Testing: \$2,800.00  Project Management  - Report Preparation/Data Entry Joseph Management - Report Preparation/Data Entry Joseph Management - Report Review/Document Management/Meetings/Special Inspections - Evaluation/Consultation - Evaluation/Consultation - Reviewation/Consultation - Revertice Sampling and Testing - Sampling -	•	nour	\$60.00	15	\$900.00
Reinforced Concrete Sampling and Testing  gineering Technician - Reinforcing Steel Placement Observation, Concrete Placement Observation.  Shallow Foundations - Reinforcing Steel and Concrete Placement Observations - Estimate 3 trips at 5 hours each. Reinforcing Steel Observations to be performed one hour prior to concrete placement.  Estimate 1 set of cylinders per pour, 6 cylinders per set  Slab on Grade - Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel Observations to be performed one hour prior to concrete placement.  Estimate 3 sets of cylinders per pour, 6 cylinders per set - Concrete Cylinders per pour, 6 cylinders per set - Concrete Cylinder Pick Up - Estimate 4 trips at lump sum por Charge - Including Mileage - Including Mileage - Compressive Strength Testing - Estimate 6 sets, 6 cylinders each each \$15.00 36 \$540.00  Reinforced Concrete Sampling and Testing: \$2,800.00  Project Management - Report Preparation/Data Entry - Report Review/Document Management/Meetings/Special Inspections hour \$145.00 10 \$1,450.00 - Evaluation/Consultation - Rejort Review/Document Management/Meetings/Special Inspections hour \$165.00 2 \$330.00	• •	each	\$40.00	3	\$120.00
- Reinforcing Steel Placement Observation, Concrete Placement Observation.  Shallow Foundations - Reinforcing Steel and Concrete Placement Observations - Estimate 3 trips at 5 hours each. Reinforcing Steel Observations to be performed one hour prior to concrete placement.  Estimate 1 set of cylinders per pour, 6 cylinders per set  Slab on Grade - Reinforcing Steel and Concrete Placement Observations - Estimate 1 trip at 8 hours. Reinforcing Steel Observations to be performed one hour prior to concrete placement.  Estimate 3 sets of cylinders per pour, 6 cylinders per set  - Concrete Cylinder Pick Up - Estimate 4 trips at lump sum trip \$180.00 4 \$720.00  Estimate 3 sets of cylinders per pour, 6 cylinders per set  - Concrete Cylinder Pick Up - Estimate 4 trips at lump sum trip \$180.00 4 \$720.00  Estimate 3 sets of cylinders per pour, 6 cylinders each each \$15.00 36 \$540.00  Reinforced Concrete Sampling and Testing: \$2,800.00  Project Management  - Report Preparation/Data Entry hour \$50.00 4 \$200.00  Project Manager - Report Review/Document Management/Meetings/Special Inspections hour \$145.00 10 \$1,450.00  inior Engineer - Evaluation/Consultation hour \$165.00 2 \$330.00					<u> </u>
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Total Estimate of Construction Materials Testing Services: \$7,805.00	Total Estimate of Constructio	n Materi	als Testin	ng Services:	\$7,805.00





BUILDERS, INC.

Mailing:

P.O. Box 410283

Charlotte, NC 28241

Shipping:

1010 Culp Road Pineville, NC 28134

Phone (704) 588-7116 Fax: (704) 588-8280

Marvin Village Hall SUBMITTAL COVER 04/27/2021

CONTRACTOR:

Randolph and Son Builders Inc 1010 Culp Rd Charlotte NC 28134

**SUBCONTRACTOR:** 

Latham Door & Hardware LLC, 415-A East Windsor Street, Monroe, NC 28112

VPPLIERS:

### **MANUFACTURER:**

In the submittal

### SUBMITTAL INFORMATION:

Doors & Hardware

Review-01

Division 08

Interior Doors (Paint Grade), Frames, Hardware

### Shop Drawing Review

■ No Exceptions Noted

X Exceptions Noted (Do Not Resubmit)

Revise And Resubmit

Rejected

Not Required - Returned Without Action

Review and approval are only for conformance with the information given and the design concept of the project as expressed in the Contract Documents. Review and approval of submittals are not conducted for the purpose of of determining accuracy and completeness of other details, such as dimensions and quantities, or for substantiating instructions for the installation or performance of equipment or systems, all of which remain

e responsibility of the contractor as required by the Contract Documents. The Architect's review and approval of the Contractor's submittals shall not relieve the Contractor from any obligation contained in the Contract Documents.

URBAN ARCHITECTURAL GROUP P.A. DATE: 5/3/2021 BY: Jonathan Mychaluk Ethiosianiu yolkak bilan kahintaria torgan PROJECT: 2020-66

**UAG NOTE: REVIEW HARDWARE STYLE &** 

KEYING WITH OWNER.

SHOP DRAWING REVIEW REVIEW IS FOR GENERAL COMPLIANCE WITH CONTRACT DOCUMENTS NO RESPONSIBILITY IS ASSUMED FOR CORRECTNESS OF DIMENSIONS OR **DETAILS** X NO EXCEPTION TAKEN MAKE CORRECTIONS NOTED **AMEND & RESUBMIT REJECTED SEE REMARKS** SEE NOTES AND OR COMMENTS RANDOLPH & SON BUILDERS, INC. By: MV Date: 04/27/2021 Scope: Doors & Hardware Div: 08

# Latham Door & Hardware, LL

415A East Windsor Street / Monroe, NC 28112

Tel. 704-296-55

# SUBMITTAL PACKAGE

Project: Marvin Village Hall

Contractor: Randolph & Son Builders, Inc.

Specification Sections: HM, WD, HDWE

Date Submitted: 4/22/2021

DOOR HEADING/KEYING INDEX PROJECT NAME - MARVIN VILLAGE HALL PROJECT NO. - A21 -005

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LATHAM HARDWARE DOOR/FRAME/HARDWARE SCHEDULE

PROJECT NAME - MARVIN VILLAGE HALL PROJECT NO. - A21 -005

	- DOOR INFO: SE	>	w									DOOR INFO		5							
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í	PROFILE HEAD GAUGE JAMB					R ABOVE	FASTNER					PROFILE HEAD	GAUGE		٠.			ABOVE	FASTNER		
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ORMATION	SWG	# # #	m m		*		DESCR		M200	5101 BC PA		RMATION SIZE			9 - B				DESCRIPTION	MR136 BFSF	מת הם ומות
GENERAL INFORMATION	HAND DEG SWG	RHRA	RHRA		OTHERS**		<b>3</b> d.	EXIT DEVICE	MULLION	DOOR CLOSER		GENERAL INFORMATION HAND SIZE DEG SWG		LHR	RHR		OTHERS***		<b>ជ្</b>	MORTISE LOCK	DOOR CLOSER
15	T	OR FROM	R FROM	,	RDWARE BY		EXT QTY TYPE	4.0 EX	2.0 MU	4.0 DO				R FROM R 02B	Z FROM Z 18B		LDWARE BY		: QTY TYPE	2.0 MOR	2.0 000
	PE BLUEPRINT TA LOCATION	EXTERIOR LOBBY 01	EXTERIOR FROM LOBBY 12	NOTES	***BALANCE OF DOOR HARDWARE BY OTHERS***		UNIT QTY EX	2.0	1.0	2.0		E BLUEPRINT A LOCATION		EXTERIOR	EXTERIOR FROM CORRIDOR 18B	TOTES	***BALANCE OF DOOR HARDWARE BY OTHERS***		QTY EXT	1.0	1.0
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PDQ PDQ

PDQ

PROJECT NAME - MARVIN VILLAGE HALL PROJECT NO. - A21 -005

LATHAM HARDWARE DOOR/FRAME/HARDWARE SCHEDULE

DOOR INFOR	SEF ELEV GAL ====================================		D-7	
	GLS PKT STS MATL	arra di la	GIA	
	ANCHOR			
RMATION	WALL TYPE			
- FRAME INFORMATION -	PROFILE HEAD GAUGE JAMB			
	ELEV	AL-1	AL-1	
	MATL	ALF	ALF	
	(Active) FIRE (Inactive) THCK RIG	3- 0.000 X 7- 0.000 1.75	3- 0.000 X 7- 0.000 1.75	
	SIZE	3- 0.000	3- 0.000	
	— GENERAL INFORMATION — HAND SIZE DEG SWG	RZH	鬥	
	BLUEPRINT	LOBBY 01 TO RECEPTION 02	LOBBY 01 TO RECEPTION 18	HEADING NOTES
DOOR/FRAME/HARDWARE SCHEDULE	(HEADING 102.00) OPENING SGL TYPE NUMBER QIY PR LOCA	01A 1 SGL	01B · 1 SGL	IIOEH ——

\*\*\*DOOR HARDWARE BY OTHERS\*\*\*

1.00

1.00, LH QTY:

-- RH Qty:

-- HARDWARE USED FOR ABOVE 2 OPENING(S) --

INFOI	SEI Gal	ь Б		Ü Ü	D D	<b>P</b> C		1.0									
DOOR INFO	ELEV	D-4		D-4	D-4	D-4		RHR Qty:									
	GLS TYG MATL	M.		ďW	Φ	WD		1.00,	MANUFACTURER	STANLEY	Cua	X	PDQ	COCERATION	TOO WOOD	ROCKWOOD	
	ANCHOR	Q		Д	Д	Q		—— ты оту:	VC	STA	Ç	Ž T J	PDQ	è	RCA	RCK	
MATION	WALL TYPE							.NG (S)	FINISH	693	Ş	622	693	i	BPC	CBEV	1
- FRAME: INFORMATION	PROFILE HEAD GAUGE JAMB	2"	8 1/4"	2" 8 1/4"	2" 8 1/4"	2"8 1/4"		4 OPENING(S)	ER HAND								
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	ELEV	1 E	†    4	स ।	F-1	균 - 다		RE USED F									
	N (Active) FIRE (Inactive) TECK RIG WAIL		3- 0.000 X 7- 0.000 1.75 20 MIN HWF	3- 0.000 X 7- 0.000 1.75 20 MIN HMF	3- 0.000 X 7- 0.000 1.75 20 MIN HMF	3- 0.000 X 7- 0.000 1.75 20 MIN HMF		. HARDWA	DESCRIPTION		FBB179 4.5 X 4.5	SD148 BSN		5101 BC PA			
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	NI C	NUMBER	0.5	12A	12B	18											

.608

12.0 SILENCER

3.0

DOOR/FRAME/HARDWARE SCHEDULE LATHAM HARDWARE

PROJECT NAME - MARVIN VILLAGE HALL PROJECT NO. - A21 -005

SEF GAL - DOOR INFOF OVZ 1.00 ELEV D-1 D-1 RH Qty: GLS PKT STS MATL MOH МБ MANUFACTURER 1.00, ROCKWOOD ROCKWOOD STANLEY PDQ - LH Qty: ANCHOR RCK STAPDQ RGK S Ø Ø PROFILE HEAD
GAUGE
... FINISH GREY 2 OPENING(S) 622 BPC 693 2" 5 7/8" 5 7/8" HAND FASTNER HARDWARE USED FOR ABOVE DU 16 DD 16 ELEV 다 다 F-1 MATL HMF HMF (Active) FIRE (Inactive) THCK RTG 7- 0.000 1.75 3- 0.000 X 7- 0.000 1.75 FBB179 4.5 X 4.5 3- 0.000 X DESCRIPTION SD176 BSN GENERAL INFORMATION HAND SIZE 409 608 DEG SWG 晋 Æ WALL STOP 6.0 SILENCER PRIVACY 6.0 HINGE EXT QTY TYPE ဥ RECEPTION 18 TO TOILET 27 2.0 RECEPTION 02 TOILET 03 2.0 SGL TYPE BLUEPRINT
OTY PR LOCATION 3.0 3.0 UNIT OTY 1.0 1.0 1 SGL ITEM 1 SGL 1000 2010 6666 5000 --- (HEADING OPENING NUMBER 03 27

mer u-								
	DOOR INFO SE: EV GA:	00.	Ο.	OV.		ΔΟ	ΔΟ	٥٨
1	DOOR ELEV	D-1	D-1	D-1	D-1	T-Q	D-1	D-1
-	GLS PKT STS MATL	MDF	MDF	MDF	MDF	MDF	MDF	MDF
	ANCHOR	Q.	Д	Д	Д	Д	Ð	Ð
MOTTER	WALL TYPE							
- FRAME INFORMATION	PROFILE HEAD GAUGE JAMB	2" 5 7/8"	2"8 1/4"	2" 5 7/8"	2" 5 7/8"	2" 5 7/8"	5 7/8"	2"
	PROFII	DU 16	DU 16	DU 16	DU 16	DU 16	DU 16	DU 16
	AETE	H - H	다	я. 1	ਜ ( ਇ	F-1 1 [£4	F-1	다 - 보
	MATL	HMF	HMF	HMF	HMF	HMF	HMF	HMF
TION	SIZE (Active) FIRE (Inactive) THCK RIG	3- 0.000 X 7- 0.000 1.75	3- 0.000 X 7- 0.000 1.75	3- 0.000 X 7- 0.000 1.75	3- 0.000 X 7- 0.000 1.75	3- 0.000 X 7- 0.000 1.75	3- 0.000 X 7- 0.000 1.75	3- 0.000 X 7- 0.000 1.75
- GENERAL INFORMATION -		кн	ПН	RH	RH	TH	EB	HI
	LOCA LOCATION  CORRIDOR 02B TO OFFICE #1 04	CORRIDOR 02B TO OFFICE #1 04	OFFICE #2 06 TO CLOSET 05	CORRIDOR 02B TO OFFICE #2 06	CORRIDOR 02B TO OFFICE #3 07	CORRIDOR 02B TO OFFICE #4 08	CORRIDOR 02B TO OFFICE #5 09	CORRIDOR 02B TO OFFICE #6 10
IG 105.0	SGL QTY PR	1 SGL	1 SGL	1 SGL	1 SGL	1 SGL	1 SGL	1 SGL
(HEADING 105.00)	OPENING	04	. 05	90	0.0	08	60	10

5 7/8"

LATHAM HARDWARE DOOR/FRAME/HARDWARE SCHEDULE

PROJECT NAME - MARVIN VILLAGE HALL PROJECT NO. - A21 -005

INFO	SEI	8	5	OV.	ον.	ΟΛ.	OV.	oo	ΛΟ	7.00					
DOOR INFO	ELEV		۲ ا	D-1	D-1	D-1	D-1	D L	D-1	гн оту:					
	GLS PKT STS MATL		A COL	MDF	MDF	MDF	MDF	MDF	MDF	6.00,	MANUFACTURER	STANLEY	Dag	ROCKWOOD	ROCKWOOD
	ANCHOR		₽	Ð	Q.	Q.	Ð.	Q.	Д	—— кн осу:	VC	STA	PDQ	RCK	RCK
***************************************	WALL TYPE									NG(S)	FINISH	693	622	въс	GREY
	- FRAME INFORMATION FILE HEAD WALK		2" 8 1/4"	2" 5 7/8"	2" 5 7/8"	2" · 5 7/8"	2" 5 7/8"	2" 5 7/8"	2" 8 1/4"	14 OPENING(S)	R HAND				
•	PROFILE HEAD	GROGE	DU 16	DU 16	DU 16	DU 16	DU 16	DU 16	DU 16	HARDWARE USED FOR ABOVE	FASTNER				
		Naua	F-1	ਜ਼ - ਜ਼	F-1	F-1	다 - 도	면 면	다 1 14	RE USED 1					
		MATLL	HMF	HMF	HMF	HMF	HMF	HMF	HMF	— HARDWA					
		(Inactive) THCK RTG	7- 0.000 1.75	: 7- 0.000 1.75	7- 0.000 1.75	17- 0.000 1.75	. 7- 0.000 1.75	Z 7- 0.000 1.75	K 7- 0.000 1.75			X 4.5	·		
	MATIONSIZE	<u>უ</u>	3- 0.000 X	3- 0.000 X	3- 0.000 X	3- 0.000 X	3- 0.000 X	3- 0.000 X	3- 0.000 X		DESCRIPTION	FBB179 4.5	SD126 BSN	409	809
	GENERAL INFORMATION HAND SIZE	DEG SWG	HI	LHR	哲	RH	RH	門	TO RH			e	PASSAGE SET	WALL STOP	SILENCER
		NOI	CORRIDOR 02A TO ARCHIVES 11	CONFERENCE 21 FROM	CORRIDOR 18A TO	CORRIDOR 18B TO	CORRIDOR 18B TO	CORRIDOR 18B TO ADMINISTRATION 25	ADMINISTRATION 25 TO RH CLOSET 26		EXT OTY TYPE				
SCHEDULE	TYPE BLUEPRINT	LOCA LOCATION		CONFERENCE	CORRI	CORRI	CORRI	CORR	ADMII	,	TRATE OFFY	, C	) -	, c	. O.
ARDWARE 8	G 105.00)	QTY PR	1 SGL	1 SGL	1 SGL	1 SGL	1 SGL	1 SGL	1 SGL		Mart		9 6	0 0	6 6 6 6 6
DOOR/FRAME/HARDWARE SCHEDULE	HEADING			19	21	23	24	25	26						

INFC	# 6 #	б	٥ ر
— DOOR IN	ELEV	D-1	D-1
	GLS PKT STS MATL ====================================	MDF	MDF
	ANCHOR	Q.	Д
MATION	WALL TYPE		
FRAME INFORMATION —	TAMB	2" 5 7/8"	2" 5 7/8"
EE	PROFILE HEAD GAUGE JAMB	DU 16	DU 16
	ELEV	F-1	₽ - #
	GENERAL INFORMATION (Active) FIRE  I HAND SIZE (Active) FIRE DEG SWG (Inactive) THCK RIG MAIL	12A TO LH 3-0.000 X 7-0.000 1.75 20 MIN HMF	12A TO RH 3- 0.000 X 7- 0.000 1.75 20 MIN HMF
	OPENING SGL TYPE BLUEPRINT NUMBER OTY PR LOCA LOCATION	13 1 SGL CORRIDOR 12A TO WOMEN 13	17 1 SGL CORRIDOR 12A TO MEN 17

PROJECT NAME - MARVIN VILLAGE HALL PROJECT NO. - A21 -005

1.00							
RH Qty:							
2 OPENING(S) LH Qty: 1.00,	MANUFACTURER	STANLEY	ROCKWOOD	ROCKWOOD	Qag	ROCKWOOD	ROCKWOOD
—— ън осу	VC	STA	RCK	RCK	PDQ	RCK	RCK
G(S)	FINISH	693	BPC	BPC	693	BPC	GREY
	HAND						
HARDWARE USED FOR ABOVE	FASTNER						
	DESCRIPTION	FBB179 4.5 X 4.5	70C	107 X 70C	5101 BC PA	409	808
	TYPE	HINGE	PUSH PLATE	PULL PLATE	DOOR CLOSER	WALL STOP	SILENCER
	EXT OTY	6.0	2.0	2.0	2.0	2.0	6.0
	UNIT OTY	3.0	1.0	1.0	1.0	1.0	3.0
	ITEM	1000	2100	2110	4000	2000	6666

	DOOK INFO SE EV GA	8 	00	00					-		
1	ELEV	D-2	D-2	D-2							
-		MDF	MDF	MDF		2ty: 3.00	MANUFACTURER	STANLEY	QQI	ROCKWOOD	ROCKWOOD
-	ANCHOR	Q.	Ð	Ω		—— RHRA Qty:	VC	STA	PDQ	RCK	RCK
· teorer	MALL TYPE					G(S)	FINISH	693	622	BPC	GREY
ייסדיי מארמס	HEAD JAMB	2" 5 7/8"	2" 8 1/4"	2" 5 7/8"		3 OPENING(S)	HAND				
G.:	PROFILE HEAD GAUGE JAMB	DU 16	DU 16	DU 16		OR ABOVE	FASTNER				
	ELEV	F-2	F-2	F1-2		HARDWARE USED FOR ABOVE					
	MATT	HMF	HMF	HMF		- HARDWAI					-
NOT THE	SIZE (Active) FIRE (Inactive) THCK RIG	3- 0.000 X 7- 0.000 1.75 3- 0.000 X 7- 0.000	3-0.000 X 7-0.000 1.75 3-0.000 X 7-0.000	3- 0.000 X 7- 0.000 1.75 3- 0.000 X 7- 0.000			DESCRIPTION	FBB179 4.5 X 4.5	SD126 BSN	555	608
GENERAL, INFORMATION	HAND DEG SWG	RHRA	RHRA	RHRA							
	BLUEPRINT LOCATION	MEETING 15 FROM TABLES & CHAIRS 14	MEETING 15 FROM AUDIO/VIDEO 16	CORRIDOR 18A FROM CLOSET 20	,		UNIT OTY EXT OTY TYPE	6.0 18.0 HINGE	1.0 3.0 PASSAGE SET	2.0 6.0 FLUSH BOLITS	2.0 SILENCER
3 108.00)	SGL '1 QTY PR I	1 PR	1 PR	1 PR	•		ITEM UN	1000	2000	2600	
(HEADING 108.00)	OPENING NUMBER C	14	16	50							

•			*-
R INFC	Si	ð	6 
DOOR		ELEV	D-3
777771	GI'S	PKT STS MATL	MDF
		ANCHOR	<u>Q</u>
RMATION	WALL	TYPE	
FRAME INFORMATION	PROFILE HEAD	JAMB	2" 8 1/4"
	PROFII	GAUGE	DU 16
- Anna		ELEV	년 도-3
		MATT	N HMF
	(Active) FIRE	(Inactive) THCK RIG	3- 0.000 X 8- 0.000 3- 0.000 X 8- 0.000
GENERAL INFORMATION	HAND SIZE	DEG SWG	RHRA 3- 0.000
	SGL TYPE BLUEPRINT	NUMBER OTY PR LOCA LOCATION	S M
G 109.0	SGL	OTY PR	15A 1 PR
(HEADING 109.00)	OPENING	NUMBER	15A

PROJECT NAME - MARVIN VILLAGE HALL PROJECT NO. - A21 -005

Ċ	NFC.	8 8 H	ον.										DOOR INFO	SE GA		Š	ð								
Ç	DOOK INFO.	ELEV	е Д										 DOOR	FLEV		T-0	D-1								
		GLS PKT STS MATL	ਜੁਹਾਮ	ty: 2.00	MANUFACTURER	STANLEY	CCC	X CX	ROCKWOOD	PDQ	ROCKWOOD			GLS WATT.		MDF	MDF	:y: 2.00	MANUFACTURER	STANLEY	PDQ	рос	ROCKWOOD		ROCKWOOD
		ANCHOR	Д	RHRA Qty:	ΔC	STA	ç	ŽO.	RCK	PDQ	NO.				ANCHOR	Ð	₿.	—— LH Qty:	VC	STA	QQA	PDQ	Σp	Y C	RCK
	ATION	WALL TYPE		G(S)	FINISH	693	ļ	622	BPC.	693	Ç	j	) (	WALL	TYPE			NG(S) ——	FINISH	693	622	93	1	D F	GREY
- MARVIN VILLAGE HALL - A21 -005	FRAME INFORMATION	HEAD	2" 8 1/4"	2 OPENING(S)	A HAND									PROFILE HEAD  WAL	JAMB	2" 8 1/4"	2"8 1/4"	2 OPENING(S)	er Hand						
- MARVIN VI - A21 -005	FR -	PROFILE HEAD GAUGE JAMB	DU 16	R ABOVE	FASTNER									PROFIL	GAUGE	DU 16	DU 16	OR ABOVE	FASTNER						
NAME - P		ELEV	F3	HARDWARE USED FOR ABOVE					:						ELEV	F-1	F-1	HARDWARE USED FOR ABOVE							
PROJECT NAME PROJECT NO.		MATL	HMF	HARDWAR											MATL	HME	HMH.	— HARDWA							
		(Active) FIRE (Inactive) THCK RIG	0.000 X 8- 0.000 1.75 20 MIN HWF		NOIL		4.5 X 4.5	NS		î	PA			(active) FIRE	THCK	0.000 X 7- 0.000 1.75	0.000 X 7- 0.000 1.75		NOILA	ν × 4	4	BSN	IC PA		
	1	AATION — SIZE	. w w		DESCRIPTION		FBB179	SD148 BSN	2942		5101 BC PA	409		- NOITEME		3-0	3-0		DESCRIPTION	7 9 7 1 2 2 2 2	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SD126 BSN	5101 BC PA	409	
		GENERAL INFORMATION HAND SIZE DEG SWG			מנוצאה אוויי		12.0 HINGE	2.0 CLASSROOM	O PINSH BOLTS		4.0 DOOR CLOSER	4.0 WALL STOP		GENERAL	T. HAND DEG SWG	. 02A TO LH	18A TO LH		GOVE SHOOT		6.0 HINGE	2.0 PASSAGE SET	2 0 DOOR CLOSER	2.0 WALL STOP	
SCHEDULE		TYPE BLUEPRINT	CORRIDOR 12A FROM		į	ONIT OF EAL OIL	6.0	٥٠٢	Ç	o ⊣	2.0	2.0		ļ	LOCA LOCATION					TIND TIME	3.0	1.0	1.0	٦.0	
ARE			OTY PR			ITEM	1000	2020	1 0	2500	4000	5000		171	SGL OTTY PR	1 SGL	1 SGL			ITEM	1000	2000	4000	5000	
LATHAM HARDWARE SCHEDULE	- / /s:007	Ä ra	NUMBER (											(HEADING	OPENING	15B	15D								

608

6.0 SILENCER

3.0

LATHAM HARDWARE DOOR/FRAME/HARDWARE SCHEDULE

PROJECT NAME - MARVIN VILLAGE HALL PROJECT NO. - A21 -005

	SEI	B   B	PC					
	DOOR ELEV	<del>                                  </del>	4.0					
	GLS PKT STS MATT,		ŒΨ		2ty: 2.00	MANUFACTURER	PEMKO	EMTEK
	ANCHOR				POCKET Qty:	ΔC	PMK	EMT
	MATION —— WALL TYPE				NG(S)	FINISH		USI9
	FRAME INFORMATION - PROFILE HEAD WALL GAUGE JAMB TYPE				2 OPENING(S)	SR HAND		
	PROFI				HAKUWAKE USED FOR ABOVE	FASTNER		
	ELEV				ARE USED			
_	MATL			ļ	- HARUW			
	e) FIRE e) THCK RTG	0.000 1.75	0.000 1.75				PF134	e
	(Active)	11				NC	284-2X6	
	SIZE	POCKET 3- 0.000 X 7-	3-0.000 X 7-			DESCRIPTION	PF28200A7284-2X6	220307
GENERAL INFORMATION -	HAND DEG SWG	POCKET	POCKET			PE	2.0 POCKET KIT	2.0 FLUSH PULL
5		CORRIDOR 18B TO BREAK 22	CONFERENCE 21 TO BREAK 22			EXT QTY TYPE	2.0 PO	2.0 FL
9)	TYPE BLUEPRINT LOCA LOCATION	CORRIDOR BREAK 22	CONFERENC BREAK 22			UNIT OTY	1.0	1.0
IG 111.0	SGL QTY PR	1 SGL	1 SGL			ITEM U	8000	8010
(HEADING 111.00)	OPENING NUMBER	22A	22B					

## HOLLOW METAL DOORS AND FRAN SHOP DRAWINGS

where,

PROJECT NAME-MARVIN VILLAGE HALL PROJECT NO -A21 005 DATE PRINTED-04/22/21

HOLLOW METAL FRAMES

MANUFACTURER: CECO DOOR PRODUCTS

ALL FRAMES WILL BE 16 GAGE KNOCK DOWN CONSTRUCTION. ALL FRAMES WILL BE PREPED FOR MORTISE/BORED TYPE HARDWARE AND REINFORCED FOR SURFACE APPLIED HARDWARE. ALL FRAME WILL BE MARKED WITH TAG NUMBER FOR IDENTIFICATION.

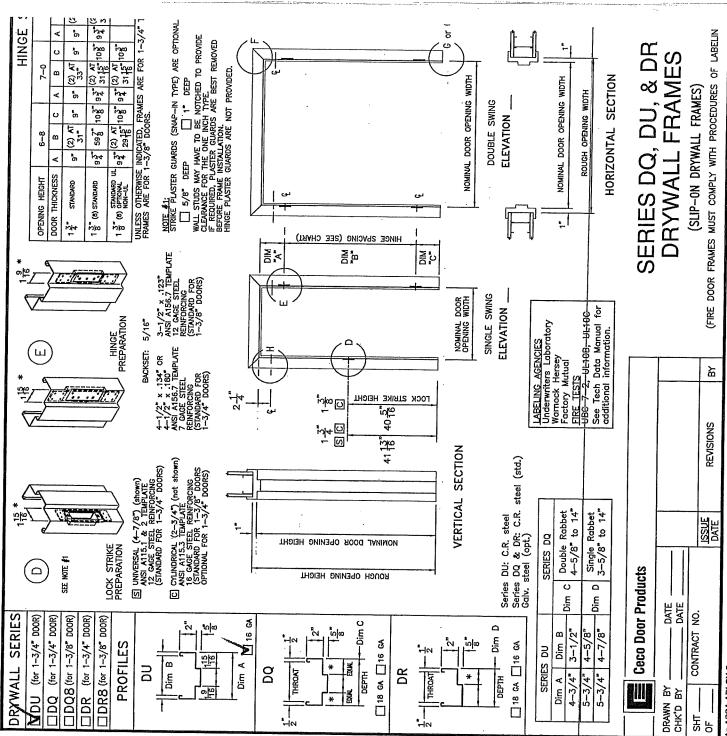
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### Joor Frames ELEVATION: Hollow Metal

 $1/4^{11} = 1^{11} - 0^{11}$ 

415 A East Windsor Street / Monroe, NC 28112 LATHAM HARDWARE CO.

tel. 704-296-5518



An ASSA ABLOY Group company

Project Name: Marvin Village Hall

PROJECT NAME-MARVIN VILLAGE HALL PROJECT NO -A21 005 DATE PRINTED-04/22/21

ARCHITECTURAL WOOD DOORS

MANUFACTURER: DOORMERICA

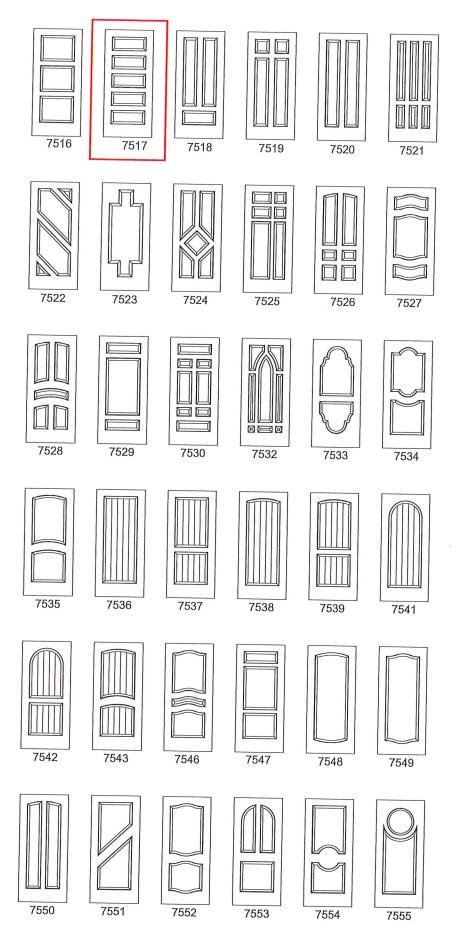
TYPE D-1 THRU D-3 DOORS WILL BE OVATION SERIES SOLID MDF STILE AND RAIL CONSTRUCTION. TYPE D-4 DOORS WILL BE FLUSH MDF FACED DOORS WITH THE MANUFACTURER'S PARTICLE CORE. ALL DOORS WILL BE PRIME PAINTED. ALL DOORS WILL BE PREPPED FOR MORTISE/BORED TYPE HARDWARE. ALL DOORS WILL BE MARKED WITH TAG NUMBER FOR IDENTIFICATION.

3,-(

Marvin Village Hall

Project Name:

tel. 704-296-5518



NOTE: SOME DOOR DESIGNS NOT AVAILIBLE IN ALL SIZES AND MAY REQUIRE A LONGER LEAD TIME.



#### Ovation Door Specifications

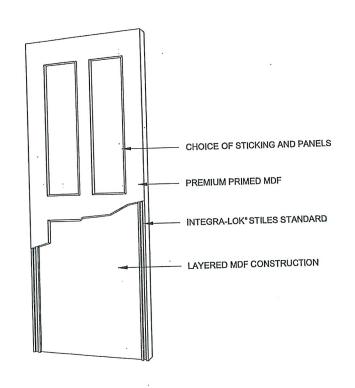
Layered MDF Construction

Patented *Fiberfuse* Process Bonds Components under Extreme Pressure

> Patented *Integra-Lok* Wood Stile Double Primed Standard

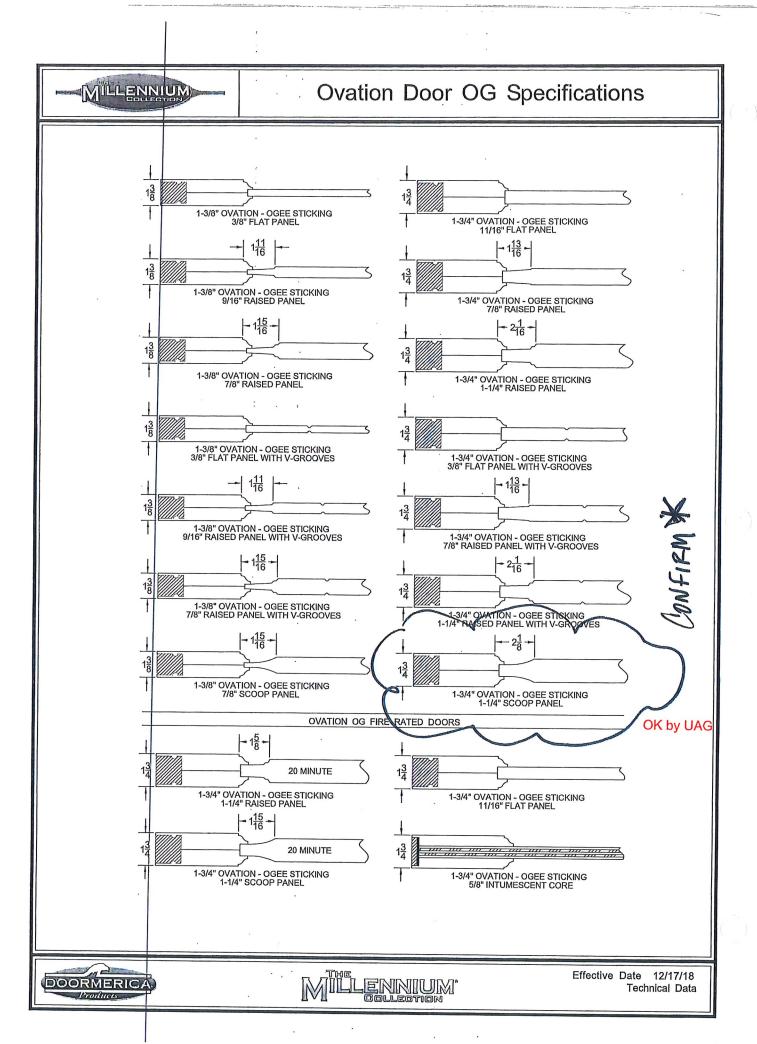
Ultra Refined MDF Solid Raised or Flat Panels With Optional Sticking Profiles

- STANDARD THICKNESS 1-3/4" & 1-3/8"
- STANDARD DOOR WIDTHS: 2/0, 2/4, 2/6, 2/8, 3/0, 3/6, 4/0
- STANDARD DOOR HEIGHTS: 6/8, 7/0, 8/0
- 20 MIN. FIRE RATING AVAILABLE ON 1-3/4", 11/16' FP & 1-1/4" RP
- WARRANTY:
   SEE LIMITED LIFETIME WARRANTY
- HARDWARE MACHINING:
   TO SPECIFICATION
- 45-90 MIN FIRE RATED PROFILES
   AVAILABLE









# HARDWARE CATALOG CUT SHEE

415 A East Windsor Street / Monroe, NC 28112 Latham Door & Hardware, LLC PROJECT NAME-WARVIN VILLAGE HALL PROJECT NO -A21 005 DATE PRINTED-04/22/21

FINISH HARDWARE \_\_\_\_\_\_\_\_\_\_\_ MANUFACTURERS: HINGES
LOCKSETS
EXIT DEVICES
CLOSERS
AUXILIARY

STANLEY
PDQ
YALE SECURITY GROUP
PDQ
ROCKWOOD, PENKO, EMTEK

FINISH DESIGNATIONS:

BSP = BLACK POWDER COAT BPC = BLACK POWDER COAT 622 = BLACK POWDER COAT 693 = BLACK PAINTED 600 = PRIME PAINTED

LATHAM HARDWARE HARDWARE SUMMARY

PAGE

FINISH/HAND FASTENER TEMPLATE 693 BSP 900 BPC 693 622 BPC BPC BPC 622 622 622 693 FBB179 4.5 X 4.5 EXIT DEVICE 2100 X PB626F DOOR CLOSER 5101 BC DS DOOR CLOSER 5101 BC PA DESCRIPTION MORIISE LOCK MR136 BFSF M200 X 8' PULL PLATE 107 X 70C SD126 BSN SD148 BSN SD176 BSN 2942 555 70C FLUSH BOLTS FLUSH BOLTS PASSAGE SET PUSH PLATE CLASSROOM ITEM TYPE MULLION PRIVACY HINGE JOB: MARVIN VILLAGE HALL JOB#: A21 -005 YALE SECURITY GROUP YALE SECURITY GROUP MANUFACTURER ROCKWOOD ROCKWOOD ROCKWOOD ROCKWOOD STANLEY ВDO PDQ PDQ PDQ <u>Ö</u> PDQ PDQ S S S VC 0.000 PDQ 0.000 XSG 0.000 YSG 0.000 PDQ 0.000 RCK 0.000 RCK 0.000 RCK 0.000 RCK 0.000 PDQ 0.000 PDQ 0.000 PDQ 0.000 PDQ 0.000 STA ORDERED INDEX AUCHGORDHUM MIGGEN 16.000 4.000 2.000 2.000 2.000 2.000 2.000 6.000 2.000 2.000 19.000 6.000 102.000 ITEM # QTY 04/22/21 4010 4000 3500 2500 2600 3000 2110 2200 2100 1000 2000 2010 2020

LATHAM HARDWARE HARDWARE SUMMARY

FINISH/HAND FASTENER TEMPLATE **US19** GREY BPC PF28200A7284-2X6 PF134 DESCRIPTION PAGE 220307 409 608 POCKET KIT FLUSH PULL ITEM TYPE WALL STOP SILENCER JOB: MARVIN VILLAGE HALL JOB#: A21 -005 ITEM # QTY ORDERED VC MANUFACTURER ROCKWOOD ROCKWOOD PEMKO EMTEK 0.000 RCK 0.000 RCK 0.000 PMK 0.000 EMT 28.000 2.000 2.000 78.000 ITEM # QIY 04/22/21 5000 8010 6666 8000

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#### 5 KNUCKLE FULL MORTISE HINGES

#### Standard Weight Ball Bearing

>FBB179 - (ANSI A\$112) Steel - polished and plated or phosphated and prime coated for painting

FBB191 - (ANSI A2112) Brass or bronze - polished and plated or painted

FBB191 (32) - (ANSI A5112) Stainless steel - highly polished

FBB191 (32D) - (ANSI A5112) Stainless steel - satin finish

For medium weight doors of average frequency

- All hinges have template screw hole location for use on either wood or hollow metal doors and frames
- Equipped with two Stanley permanently lubricated non-detachable ball bearings
- Pins in non-ferrous hinges are stainless steel
- Hole in bottom tip for easy pin removal
- Reversible flush tips and pins
- Hinges can be furnished as follows:

with raised barrel (RB)

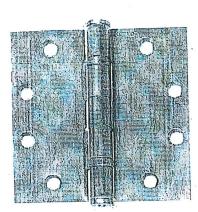
with electric wires and/or switches (CE and/or CS)

with hospital tips (HT)

with decorative tips

with security studs

with non-removable pins (NRP)



						Silver - envir - park	· - Quantity	Quantity 1	n-ve	Case W	eight	的数数数
Size	Open 🚈	AMELIA A E		auge	Flat Head	Screws Plece	Per Box	Per Case	Br	onze	St	eel
		arija)		Metal - W	Machine	Wood			Lbs.	(Kg)	Lbs.	(Kg)
Inches		nm)	Inches	(mm)	The state of the s	6 -10 x 1	3 EA.	90 EA.	58	(26)	54	(24)
31/2 X 3	(89 x	76)	.123	(3.1)	6 - 10-24 x ½		3 EA.	90 EA.	65	(29)	59	(27)
31/2 x 31/2	(89 x	89)	.123	(3.1)	6 - 10-24 x ½	6-10 x 1	100	48 EA.	43	(19)	39	(18)
4 x 3 <sup>1</sup> / <sub>2</sub>	(102 x	89)	.130	(3.3)	8 - 12-24 x 1/2	8 -12 x 1 <sup>1</sup> / <sub>4</sub>	3 EA.	48 EA.	45	(20)	42	(19)
4 x 4	(102 x	(02)	.130	(3.3)	8 - 12-24 x 1/2	8 -12 x 1 <sup>1</sup> / <sub>4</sub>	3 EA.	1.00	55	(25)	52	(24)
41/2 × 4	(114 x	(02)	.134	(3.4)	8 - 12-24 x ½	8 -12 x 1 <sup>1</sup> / <sub>4</sub>	3 EA.	48 EA.	59	(27)	55	(25)
41/2 X 41/2	(114 x		.134	(3.4)	8 - 12-24 x 1/2	8 -12 x 11/4	3 EA.	48 EA.			39	(18)
5 x 4	(127 x	1 :	.146	(3.7)	8 - 12-24 x 1/2	4 -12 x 11/4	3 EA.	30 EA.	41	(19)		
5 x 4 <sup>1</sup> / <sub>2</sub>	(127 x	1	.146	(3.7)	8 - 12-24 x 1/2	4 -12 x 11/4	3 EA.	30 EA.	45	(20)	43	(19)
	(127 X		.146	(3.7)	8 - 12-24 x 1/2	4 -12 x 11/4	3 EA.	30 EA.	50	(23)	46	(21)
5 x 5			.160	(4.1)	10 -1/4-20 x 1/2	5-14 x 11/2	3 EA.	24 EA.	43	(19)	36	(16)
*6 x 4 <sup>1</sup> / <sub>2</sub>	(152 x	1 :	6 10 100000	(4.1)	10 -1/4-20 x 1/2	5 -14 x 1 <sup>1</sup> / <sub>2</sub>	3 EA.	24 EA.	47	(21)	40	(18)
*6 x 5	(152 x		.160	, ,	10 -1/4-20 x 1/2	5 -14 x 1 <sup>1</sup> / <sub>2</sub>	3 EA.	24 EA.	67	(30)	61	(28)
*6 x 6	(152 x	152)	.160	(4.1)	10 - 74-20 X 72	0-14 X 172						

\* Available in Steel only

Consult factory for other sizes not listed



# **SERIES**

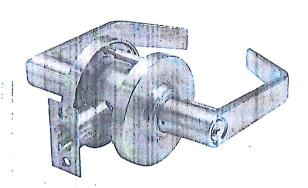
#### Grade 2 Standard Duty Cylindrical Lock



Architectural Submittal Sheet

#### **Typical Applications**

- Assisted LivingHospitality
- Houses of Worship
- Industrial
- Medium/Light Commercial Installations
- Multi-family
- Offices
- Retail



#### **Specifications**









FOR DOOF(S:	• 1-3/8" to 1-3/4" thick • Preset for 1-3/4" door
APPLICATION:	• Through door thru-bolting • Fits standard 160 and 161 Door prep • Thru-Bolts are removable
BACKSET;	• 2-3/4" standard • 2-3/8," 3-3/4," 5" optional
CHASSIS:	Heavy-gauge cold rolled steel mechanism     Dichromated for corrosion resistance
FRONT:	• 2-1/4" x 1-1/8" or 2-1/4" x 1" • Beveled 1/8" on 2" • Stainless Steel or Wrought Brass
STRII(E:	ASA standard    T-Strike or Full Lip Strike optional    Stainless Steel or Wrought Brass
LEVERIS:	Philadelphia, Boston, Miami, Memphis, Orlando
RO:SE:	• 3-3/8" DIA Wrought
LATCHBOLT:	• 1/2" Throw
HATID:	Non-handed (Except Memphis)
TRIM:	Solid diecast PHL, BSN, MIA, MEM and ORL Levers     Wrought Brass Roses     Concealed Screws
KEYS:	• Two (2) per Lock
KEYWAYS:	SCC standard (Schlage C Compatible)     Also available in keyways of other manufacturers
INTERCHANGEABLE CORE:	• 6 or 7-pin • Compatible with Best, Falcon & Arrow. Not available with Memphis lever.
CYLINDER:	6-pin Brass Insert Cylinder keyed to 5-pins     Slandard High Security and UL437 Cylinders Available
KEYING:	<ul> <li>Options: MK, CMK or GMK/Zero Bitted (KO), Keyed Different (KD) or Keyed Alike (KA)</li> <li>Can be keyed into existing master key systems</li> </ul>
FINISHES:	• 605 (US3), 613 (US10B), 619 (US19), 622 (19D), 626 (US26D)
CERTIFICATIONS, LISTINGS, COMPLIANCES:	<ul> <li>UL listed for 3 hrs, for single doors up to 4'0" x 8'0"</li> <li>Certified to ANSI/BHIMA A156.2 Grade 2</li> <li>Complies with ADA (Americans with Disabilities Act) and ICC/ANSI 117.1 for Accessible and Usable Buildings.</li> <li>Meets requirements of the Buy American Act.</li> </ul>
WARRANTY:	• Five (5) year Limited Warranty

‡ Available with antimicrobial coafing, technology that is known to inhibit the growth of microbes.

# SD SERIES Grade 2 Standard Duty Cylindrical Lock

#### PDQ Functions

	PDQ Functions								
	FUNCTION	FUNCTION NUMBER	INSIDE I OUTSIDE	DESCRIPTION	ANSI NUMBER				
	ME I			NON KEYED	7 11 1 1 1 1 1 1 1 1				
	Communicating	SD125		Latchbolt operated by inside lever     Blank plate outside     Minimum clearance of 1-1/2" between doors     Deadlocking (guarded) latchbolt					
V	Passage	SD126		Latchbolt operated by lever from either side at all times	F75				
	Privacy Bedroom Bathroom	SD176		Latchbolt operated by lever from either side or emergency release in outside lever     Outside lever locked by push button on inside     Outside lever unlocked by emergency release from outside, rotating inside lever, or closing door	F76				
				KEYED					
	Storeroom	SD115		Latchbolt operated from outside by key, inside by lever     Outside lever always fixed     Inside lever always free     Deadlocking (guarded) latchbolt	F86				
	Entrance	SD116		Latchbolt operated by lever from either side or key in outside lever Outside lever locked by push/turn button on inside When outside lever is locked by push button on inside — key from outside, or rotating inside lever unlocks outside lever When outside lever is locked by pushing and turning the button on the inside, key from outside or rotating inside lever retracts latch but does not unlock outside lever  Deadlocking (guarded) latchbolt	F109				
$\checkmark$	Classroom	SD148		Latchbolt operated by lever from either side Outside lever locked or unlocked by key from outside Inside lever always operates latch Deadlocking (guarded) latchbolt	F84				
	Entry	SD182		<ul> <li>Latchbolt operated by lever from either side or key in outside lever</li> <li>Outside lever locked by push button on inside</li> <li>Outside lever unlocked by key from outside, and rotating inside lever</li> </ul>	F82				
		HAVE THE		DUMMY					
	Single Dumm			Pull lever one side     No mechanical operation					



INDICATES RIGID LEVER

## SD SERIES Grade 2 Standard Duty Cylindrical Lock

		:					,
Levers						Y.	
						Ja	
Philadelphia		Boston	Miami	•	Memphis		Orlando 🕌
		V			(Specify Handing)		
<b>Finishes</b>	605 (US3) Bright Brass O	613 (US10B) Ill Rubbed Bronze	619 (US15) Satin Nickel	622 (US19) Flat Black	626 (US26D) Satin Chromium	,	
Options			. *				
CODE	DESCRIPTION						
SF	Split Finishes	A STATE OF THE STA					
DB	Dust Box	de .	E CONTRACTOR				
				**			
Accessori	<b>as</b>	1					
DESCRIPTIO				T 14-5-14			
A. The second	or SD Locks (U.L. Liste	d)					
	12.2.21000	:		· · · · ·			

#### Architectural Accessories & Door Trim

ASSA ABLOY

The global leader in door opening solutions

#### ROCWOOD"

70C - Push Plate - .050" Thick



#### Specifications:

MATERIAL:

Aluminum, Brass, Bronze, pr Stainless Steel

**FASTENER:** 

#6 x 5/8" OH SMS

**FEATURES:** 

Four beveled edges

#### ORDERING:

Specify plate number followed by size designation and finish (70B US32D) or for non-standard size 70 Specify width x height and finish. Specify any additional options.

#### **OPTIONS:**

- Custom sizes available upon request
- TEK self-drilling screws
- TORX security Torx screws
- SA self-adhesive mounting: 1/16" double face foam tape (no screw holes on plate)
- Engraving on plates 4" wide or wider. Specify copy.
- Cylinder cutouts (CFC) and turn knob cutouts (CFTT)
- Heavy bevel available on 70A to 70G, specify HVBEV



ROCKWOOD Manufacturing Company

Rockwood, Pennsylvania 15557

Phone: (800) 458-2424 • Fax: (800) 922-9212

www.rockwoodmfg.com • info@rockwoodmfg.com

## Architectural Door Accessories

### **ASSA ABLOY**Opening Solutions

opening sold illons

Experience a safer and more open world

#### Rockwood 107 x 70C - 4" x 16" Pull Plate



#### Specifications:

MATERIAL:

Aluminum, Brass, Bronze, or Stainless Steel

**FASTENERS:** 

#6 x 5/8" Oval Head Sheet Metal Screws; 1/4"-20 x 2 1/4" Thru Bolt & Finish Washer (standard 1 3/4" door)

**OPTIONS** 

- Barrier Free available in 2 1/2 clearance use BF prefix when ordering (BF107 x 70C)
- Advise if door thickness is other than 1 3/4"
- Mounting selections for standard duty 1/4"-20 can be viewed under Mounting Details at www.rockwoodmfg.com

0 11534605 2 化多数压缩管 · USIM612 a leis herenans o Wandelkense a US 26/625 a US260W26 a U.528/628. a US32/529 o (US\$ 23 f) \$-6.11532中時30 · DSSERVE SHIP o USBRIDANIS ANSI AT SEE

ASSA ABLOY Opening Solutions Architectural Accessories Group Rockwood, PA

Phone: (800) 458-2424 • Fax: (800) 922-9212

www.assaabloydooraccessories.us

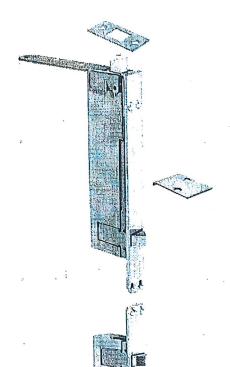
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# Architectural Door Accessories

#### **ASSA ABLOY**

The global leader in door opening solutions

#### Rockwood 2942 - Automatic Flush Bolt Set





MATERIAL:

Brass, Stainless Steel

#### FASTENERS:

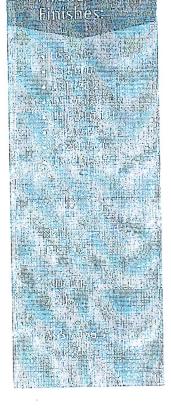
12 ea. #8 x 3/4" Flat Head Combo Screws 4 ea. #8-32 x 1/2" Flat Head Machine Screws 6 ea. #10 x 1" Flat Head Wood Screws 2 ea. #6-8 Plastic Anchors

#### **FEATURES:**

- For wood doors
- Non-handed
- Fully automatic-opening active door retracts top and bottom bolts
- Low closing force
- Override feature prevents damage to doors or bolts if bolt heads are blocked from entering strikes
- Bolt head rods are adjustable up to 1/2"
- Thermal lock automatically locks the inactive door under high heat conditions due to fire
- UL Listed

#### OPTION:

Can be used with the No. 57 Dust Proof Strike





300 Main Street

Rockwood, Pennsylvania 15557

P: 800.458.2424 • F: 800.922.9212

www.rockwoodmfg.com • orders.rockwood@assaabloy.com

# Architectural Accessories & Door Trim

ASSA ABLOY

The global leader in door opening solutions

ROCCWOOD

555 - Lever Extension Flush Bolt



#### Specifications:

MATERIAL:

Brass

#### **FASTENERS**:

8 ea. #8 x 3/4" Flat Head Combo Screws

#### **FEATURES:**

- For Fire Rated Hollow Metal Swinging Doors measuring up to 4'w x 10'h rated up to and including 3 Hours
- Fits ANSI A115 door and frame preparation
- 3/4" bolt throw, 3/4" rod backset
- 12" rod length (center of face to bolt end retracted)
- 1 1/2" adjustable bolt head

#### (ŲL)

#### **OPTIONS:**

- Other size rods available are 18", 24", 36", 48"
- Extra long bolt head 2 1/2" (or to your specification)
- Use #570 Dust Proof Strike to prevent dirt blocking bottom strike

ROCKWOOD Manufacturing Company

Rockwood, Pennsylvania 15557

Phone: (800) 458-2424 • Fax: (800) 922-9212

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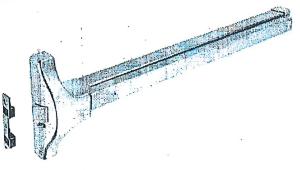
2100 series

exit devices

rim -

2100(F)

The 2100(F) is a rim exit device to be used with single doors or pairs of doors constructed of metal, wood or composite materials. The 2100(F) can be paired with a wide variety of trims to meet many applications.



certification/compliance

UL/cUL Listed:

FVSR/FVSR7 - Panic hardware

GXHX/GXHX7 - Fire exit hardware (F)

' x 8' single, 8' x 8' pairs, 3 hr.)

ZHEM - Latching hardware

ZHLA - Windstorm rated assemblies

features

Designed for wide stile doors

Non-handed for easy installation Steel interlock "E" bracket maintains door-to-mullion relationship in fire-labeled devices

Deadlocking pul man latchbolt positively engages roller strike Available certified hurricane resistant (refer to local

codes). Specify 2100(F)WS

Hurricane

ANSI/BHMA Certified: A156.3 Type 1, Grade 1

Single swing doors

Pairs of doors (mullion required)

Metal, wood or composite door materials

applications

specifications Door Opening Width:

Door Thickness:

-36 for 30" - 36" (76cm - 91cm) doors

-42 for 36" - 42" (91cm - 107cm) doors

-48 for 42" - 48" (107cm - 122cm) doors 1-3/4" (44mm) standard. Optional door thicknesses available to 4-1/2"; specify door thickness

when ordering.

4-1/2" (114mm) Minimum Stile Width: 2-1/2" (64mm) active, 1-3/4" (44mm) depressed Projection:

3/4" (19mm) deadlocking stainless steel pullman-type Latchbolt:

757F, 793 optional (double door application, panic only) Strike:

Machine screws and wood door fasteners standard for panic hardware. Sex nuts and bolts Fasteners:

supplied standard for fire exit hardware.

121NL cylinder only, 210F series utility trim, 440F series rose trim, 580F series rose trim with Trims: escutcheon plate, 620F series escutcheon trim, 630F series pull/thumbpiece trim. See pages

13-15.

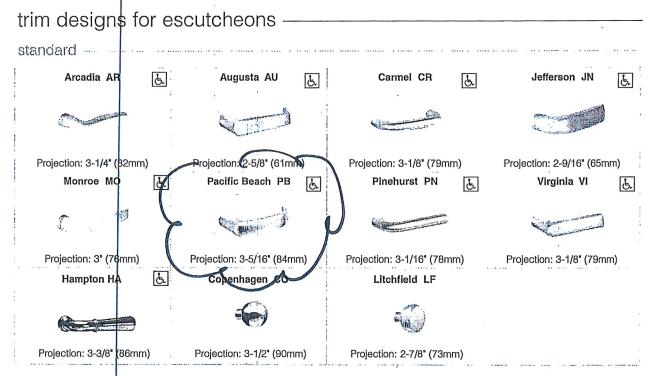
Hex key dogging supplied standard on panic devices Dogging:

613E, 630, 689, 691, 693, 695 Finishes:

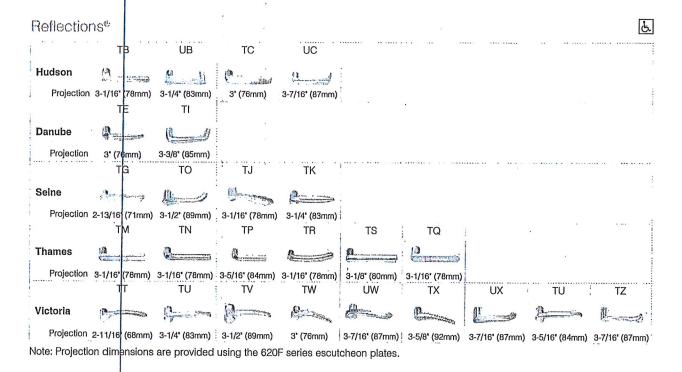
Shim kit #223, sex nuts and bolts, MicroShield® Options:

3-year limited Warrahty:





Note: Projection dimensions are provided using the 620F series escutcheon plates.





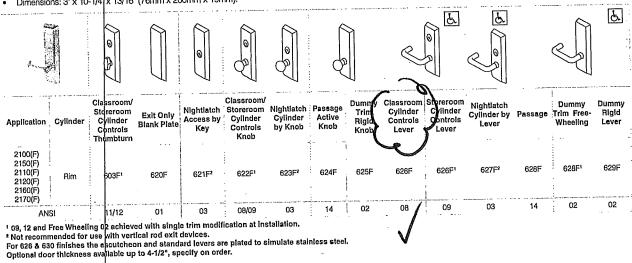
2100 series exit devices

#### exit device trims

#### 620F series wide escutcheon trim

- Certified ANSI/BHMA A156.3, Grade 1. Trim through-bolts to exit device for strength.
  Beveled sides Improve attack resistance.
  Solid forged escutcheon and Free-Wheeling trim resists vandalism and
- Flush cylinder in 6-pin applications for additional security.
- 1-3/4\* (44mm) door standard. For doors through 2-1/4\* (57mm) or shirm-mounted devices, specify on order.
- Dimensions: 3' x 10-1/4' x 13/16' (76mm x 260mm x 19mm).

- Cylinders not included. See page 16 for cylinder options. Available with AR, AU, CR, JN, MO, PB, PN, VI, HA lever designs and CO, LF knob designs. See page 12.
  - Finishes: 613E, 626, 630, 693
- Available with Reflections® lever designs. See page 12. Finishes: 613E, 626, 630
- Trim ordering example: AU626F x 626 x RHR.
- 5-year limited warranty.



#### 630F series wide pull/thumbpiece trim -

- Certified ANSI/BHMA A156.3, Grade 1. EHMA Trim through-bolts to exit device for strength. Beveled sides improve attack resistance.

- Solid forged escutcheon resists vandalism and abuse.
- Flush cylinder in 6-pin applications for additional security.

  1-3/4' (44mm) door standard. For doors through 2-1/4' (57mm) or shimmounted devices, specify on order.
- Plate Dimensions: 2-3/4" x 15-1/2" x 5/8" (70mm x 394mm x 16mm).
  Pull Dimensions: 6-7/16" (164mm) on centers x 2-1/8" (54mm) projection.
  Cylinders not included. See page 16 for cylinder options.
  Finishes: 613E, 626, 630, 693

- Trim ordering example: 630F x 630
- 5-year limited warranty.

1110011100 001110111 1-1-1							
		0					
Applications Cylinder	Exit Only Blank Plate	Nightlatch Access by Key	Nightlatch Cylinder by Pull	Classroom Cylinder Controls T-Plece	Storeroom Cylinder Controls T-Piece	Dummy Trim Pull Plate	Passage Active T-Piece
2100(F) 2150(F) 2110(F) Rlm 2120(F) 2160(F) 2170(F)	630F	631F²	632F²	633F	633F1	634F	635F
ANSI	01	03	03	05	06	02	15

1 06 achieved with single trim modification at installation.
2 Not recommended for use with vertical rod exit devices.
For 626 & 630 finishes the escutcheon is plated to simulate stainless steel.
Optional door thickness available up to 4-1/2", specify on order.



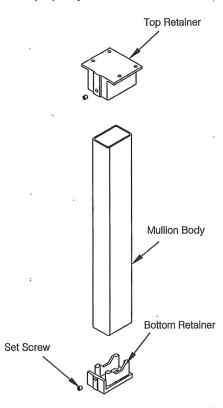
mullions

M200(F) removable mullion

M200(F) steel mullions are for use with 2100(F) series exit devices. Mullions may be field cut to fit opening. Red primer finish.

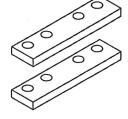
M200 panic rated. Tubular steel, 2" x 3" (51mm x 76mm). Specify 7', 8', or 10'. M200F 3 hour fire rated.

Tubular steel, 2" x 3" (51mm x 76mm). Specify 7' or 8'.

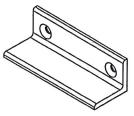


M200(F) options

M203 Spacer Block
Recommended for double rabbeted frames where the stop face width is less than the mounting hole spacing or for applications with 5-3/4" (146mm) or less door frames.



M204 Angle Bracket Recommended for any header configuration with less than 3" (76mm) of mounting surface.



#### 5100 SERIES

# Grade 1 Commercial Full Featured Closer

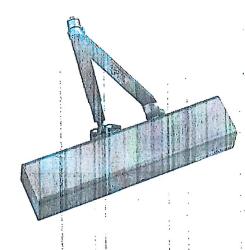


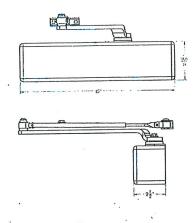
Architectural Submittal Sheet

#### Typical Applications

- Aluminum Storefronts
- · Assisted Living
- Government Facilities
- Higher Education
- Hospitality
- Houses of Worship
- Interior Office Doors
- Multi-family
- Offices
- Retail













	·	
BODY:	High Strength Aluminum Alloy Body	1 200
ARM OPTIONS	PA – Parallel Arm HO – Hold Open DS/DSHO – Heavy Duty Parallel Arm Stop RA – Regular Arm	<ul> <li>SCS/SCSHO – Heavy Duty Parallel Arm Gushion Stop</li> <li>TA/TAHO – Track Arm</li> <li>EDA/EDAHO – Extra Duty Parallel Arm</li> <li>PS – Pivot Stop Arm*</li> </ul>
PISTON	Hardened steel, 1-1/2" diameter	
ADJUSTMENY	Hydraulic controlled closing       Separate hydraulic backcheck sta	andard • Optional delayed action (in addition to backcheck)
SIZI:	• Agjustable 1 through 6.	
MOUNTING	<ul> <li>Tri-packed for regular, top jamb and parallel arm installations</li> <li>Includes sex nuts/bolts and screws for wood/metal doors/frames</li> <li>Self drilling, self tapping screws available</li> <li>Separate limiting stop may be required for high abuse application</li> </ul>	
COVER	Full plastic cover standard, optional full metal cover available	
COLOR & ARCHITECTURA FINISHES		3 – Black, 695 – Duro Bronze, 696 – Gold
WARRANTY	Twenty-five (25) year Limited Warranty	
CERTIFICATIONS LISTINGS, COMPLIANCES		hours

## 5100 SERIES Grade 1 Commercial Closer

#### Closers

	CODE	DESCRIPTION
V	5101 BC PA	Closer, 1-6, full cover, SNB (Tri-pack)
	5101 BC RA	Closer, 1-6, full cover, regular arm, SNB
	5101 BC PA HO	Closer, 1-6, hold open, full cover, SNB (Tri-pack)
V	5101 BC DS	Closer, 1-6, door saver, full cover, SNB (PA only)
	5101 BC DSH0	Closer, 1-6, door saver hold open, full cover, SNB (PA only)
	5101 BC EDA	Closer, 1-6, extra duty arm, full cover, SNB (PA only)

CODE	DESCRIPTION
5101 BC EDA HO	Closer, 1-6, extra duly arm hold open, full cover, SNB (PA only)
5101 BC SCS	Closer, 1-6, door saver w/spring cushion stop, full cover, SNB (PA only)
5101 BC SCSHO	Closer, 1-6, door saver hold open w/spring cushion stop, full cover, SNB (PA only)
5101 BC TA	Closer, 1-6, track arm, full cover, SNB (for body only)
5101 BC TAHO	Closer, 1-6, track arm hold open, full cover, SNB (for body only)
5101 BC PS	Closer, 1-6, pivot stop, full cover, SNB (for body only)

#### **Finishes**



625 (US26) Bright Chromium 689 (US28) Aluminum

9 (US28) 6

693 Black

695 Dark Duranodic

696 (US4)) Satin Brass (Gold)

V

#### **Options**

CODE	DESCRIPTION
5141	Delayed Action (when ordering, replace 5101 with 5141 in part number)

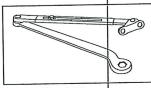
#### **Spring Cushion Stop**

CODE	DESCRIPTION
SCS-1	For 3'0" X 8'0" wood or hollow metal doors and frames
SCS-2	For 4'0" X 8'0" wood or hollow metal doors and frames

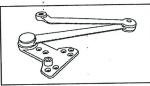
## 5100 SERIES Grade 1 Commercial Closer

#### Arms

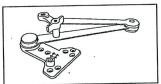
/	CODE	DESCRIPTION
	RA	REGULAR ARM - Can be mounted REG/TJ/PA (requires PA bracket)
	EDA	EXTRA DUTY ARM - PA application only (bumper eliminated)
V	DS	DOOR SAVER ARM (Limiting Stop) - PA application only
П	DSH0	DOOR SAVER HOLD OPEN ARM (limiting stop) PA application only
	НО	HOLD OPEN ARM – can be mounted REG/TJ/PA (requires PA bracket)
	EDAH0	EXTRA DUTY ARM HOLD OPEN - PA application only (bumper eliminated)
	TA	TRACK ARM ASSEMBLY - (Includes track, arm and screws)
	TAHO	TRACK ARM HOLD OPEN
V	PA	PARALLEL ARM BRACKET - NON HOLD OPEN applications
	PAHO	PARALLEL ARM BRACKET- HOLD OPEN applications
	PS	PIVOT STOP ARM - Regular and Top Jamb Only



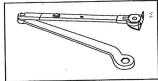
RA - REGULAR ARM



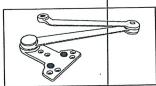
DS - DOOR SAVER (LIMITING STOP) ARM



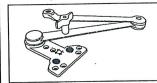
DSHO - DOOR SAVER (LIMITING STOP) HOLD OPEN ARM



HO - HOLD OPEN ARM



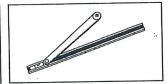
**EDA - EXTRA DUTY ARM** 



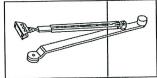
**EDAHO -** EXTRA DUTY ARM HOLD OPEN



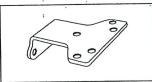
TA - TRACK ARM ASSEMBLY



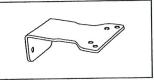
TAHO - TRACK ARM HOLD OPEN



PS - PIVOT STOP ARM



PA - PARALLEL ARM BRACKET



PAHO - PARALLEL ARM HO BRACKET

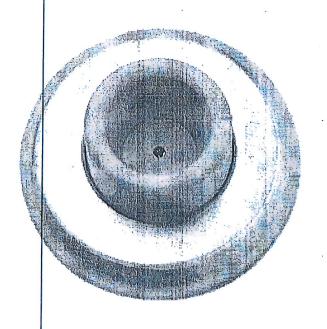
#### Architectural Accessories & Door Trim

**ASSA ABLOY** 

ROCCWOOD'

The global leader in door opening solutions

409 - Concave Wrought Wall Stop





#### Specifications:

Wrought Brass, Bronze, and Stainless Steel with DuraFlex Bumper

**FASTENERS**;

#8 x 1 1/4" Truss Head Sheet Metal Screw, Plastic Toggle

Concealed mounting, concave bumper. Back plate prevents damage to wall.

BUMPER:

Concave

ROCKWOOD Manufacturing Company Rockwood, Pennsylvania 15557

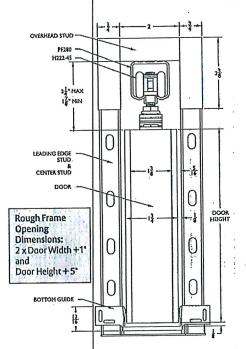
Phone: (800) 458-2424 • Fax: (800) 922-9212

www.rockwoodmfg.com • rockwoodorders@assaabloy.com

#### Pocket Frame Kit

For Sliding Panels up to 200 lbs.





NOTE: ¾" plywood can be installed to the studs in the pocket to add strength and rigidity to pocket door walls.

#### Features:

- Heavy duty hardware supports doors up to 200 lbs. each
- Standard kit is for 13/8" door. For 13/4" door, MUST use PF134KIT (see Options below)
- Chrome plated steel hangers are corrosion resistant and no maintenance is required
- 5 year warranty
- Meets ADA push force requirements

#### Pocket Frame Kit Includes:

- 1 ea Header Track Assembly
- 4 ea PFAS\_ Aluminum Cased Wood Studs
- 2 ea PFHB-1 and PFHB-2 Pre-Mounted Header Brackets
- 2 ea H222R1 Hangers
- 2 ea PFFC-8 Floor Cleats
- 1 ea PFBS Pocket Frame Bumper Stop
- 1 ea PFBG-8 Pocket Frame Bottom Guide for 13/8" Thick Doors Mounting Hardware

	THE RELEASE	Standard Ki	t Sizes	
,	2x4 Wood or Metal Stud Constructed Walls	2x6 Wood Stud Constructed Walls	2x6 Metal Stud Constructed Walls	Net Door Size (The Kits can be trimmed in field)
,	PF28200A6080 PF28200A7280 PF28200A9680		PF28200A6080-SP6 PF28200A7280-SP6 PF28200A9680-SP6	2'6" x 6'8" 3'0" x 6'8" 4'0" x 6'8"
	PF28200A6084  PF28200A7284  PF28200A9684	PF28200A6084-2x6 PF28200A7284-2x6 PF28200A9684-2x6	PF28200A6084-SP6 PF28200A7284-SP6 PF28200A9684-SP6	2'6" x 7'0" 3'0" x 7'0" 4'0" x 7'0"
	PF28200A6096 PF28200A7296 PF28200A9696	PF28200A6096-2x6 PF28200A7296-2x6 PF28200A9696-2x6	PF28200A6096-SP6 PF28200A7296-SP6 PF28200A9696-SP6	2'6" x 8'0" 3'0" x 8'0" 4'0" x 8'0"

Options: PF134 KIT

PFAS84

PFAS88

PFAS100

PFKIT-4

PFKIT-8

- Recommended for use with 1 ¾" thick doors in 2x4 constructed wall kits (3 ½" stud)
- Soft Close available. See page 278 for more information.
- For doors over 3' wide an extra pair of 84" center studs with floor cleat for 80" tall doors recomended
- For doors over 3' wide an extra pair of 88" center studs with floor cleat for 84" tall doors recommended
- For doors over 3' wide an extra pair of 100" center studs with floor cleat for 96" tall doors recommended
- PFCDKIT Conversion Kit to achieve a bipart double door frame
  - Replacement Hardware Kit for Pemko Pocket Frame Kit for 1 ¾" thick doors (Each contains 2-H222-45 Hangers, 1-PFBS Bumper Stop, 1-PFBG-4 Guide, 2 PFHS Header Shims, 2-PFFC-4 Floor Cleats)
  - Replacement Hardware Kit for Pemko Pocket Frame Kit for 11/8" thick doors (Each contains 2-H222-45 Hangers, 1-PFBS Bumper Stop, 1-PFBG-8 Guide, 2-PFFG-8 Floor Cleats)

Soft Close available. See page 286 for more information.

ASSA ABLOY

Opening Solutions

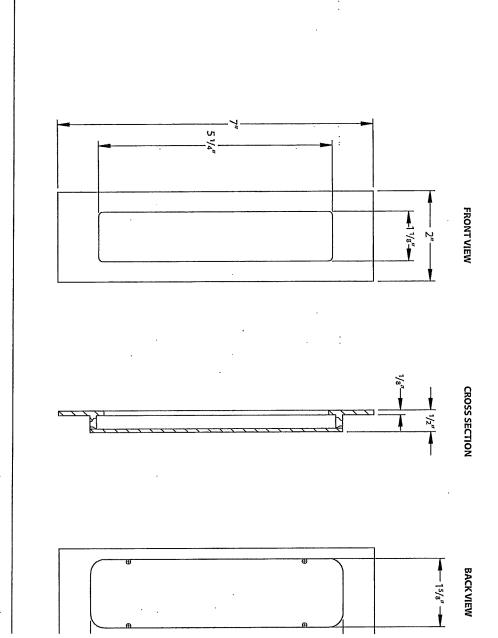
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# MODERN RECTANGULAR FLUSH PULL - 7"



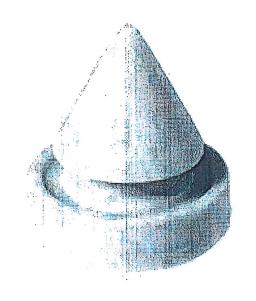
\*Note: For general info only. Not drawn to scale. Do not use as a drilling template.

TOP VIEW

# ROCOVOOD<sup>®</sup>

# ASSA ABIOY

608 - Door Silencer



Available Fini

# Specifications:

Material: DuraFlex Gray Rubber

Other: Sold in packages of 100.

Size: 1/2" dia. x 5/8"

Frame Type: metal

Weight: 1.3 lbs./500

ANSI A156.16: L03011

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